CALIFORNIA
ENERGY
COMMISSION

PUBLIC INTEREST ENERGY RESEARCH (PIER) PROGRAM

INDEPENDENT REVIEW PANEL RESPONSE

STAFF REPORT

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Arnold Schwarzenegger, *Governor*

CALIFORNIA ENERGY COMMISSION

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EXECUTIVE SUMMARY

Background

The second Independent Review Panel (IRP) was formed to evaluate the Public Interest Energy Research program and make recommendations to both the Legislature and the California Energy Commission (Energy Commission) regarding program design and implementation. The second IRP's preliminary report, dated March 2004, emphasizes the organizational challenges facing PIER.

Mission

The second IRP has tasked the Energy Commission with "...develop(ing) a strategic operational and implementation response to solve PIER's structural problem. The response should include the development of two parallel plans, one to include a greater degree of operational independence and authority within the Energy Commission and the other to include a structure outside of the Energy Commission...For the IRP to incorporate the evaluation of the plans in its final report, the response should be completed by August 1, 2004."

Approach

In response to the IRP request, the Energy Commission defined an analytical approach to evaluate the three alternative organizational constructs: a) an internal option within the Energy Commission, b) a Joint Powers Authority, and c) a Public Benefit Corporation. This approach consists of six steps:

1. Identify organizational problem statements in the IRP preliminary report, dated March 2004
2. Identify the guiding principles that make PIER a unique program
3. Identify the attributes of a first-class public interest R&D organization
4. Develop a concept organization for each of the three alternative organizational constructs that addresses the guiding principles, problem statements and attributes
5. Identify implementation implications for each alternative
6. Compare the organizational concepts based on the priorities used for their design.

Guiding Principles

Any PIER organizational structure will need to abide by the guiding principles that make PIER a unique program:

- Integrated with state energy policy
- Funds public interest energy research that benefits California electric ratepayers
- Complimentary with other public and private sector R&D efforts and implementation programs

- Non-duplicative of private sector research
- Clear and manageable program mission, vision and strategic objectives
- Conveys high-impact information for decision making to policymakers in a timely manner.

These guiding principles are derived from the PIER Program's enabling legislation (e.g., AB 1890, SB90, SB 1194, AB 995, SB 1038) and the Energy Commission's response to the legislative requirements in implementing the program (e.g., PIER Five Year Research Plan, PIER Vision, PIER Mission, Integrated Energy Policy Report, Energy Action Plan). The Energy Commission has made sure that the organizational concepts presented in this report adhere to these guiding principles.

Key Findings

Internal Option Concept

Implementing the Internal Option Concept as envisioned by the IRP will require obtaining administrative and legislative exemptions. These exemptions apply to three key areas:

- Staffing. Vesting staffing control with the Program Director requires administrative relief from Department of Personnel Administration (DPA), State Personnel Board (SPB), and Public Employment Relations Board (PERB) oversight. Examples of this staffing control include:

  - Creating positions outside of the budget change proposal (BCP) process (one year for the BCP, up to an additional year to hire)
  - Changing the organizational structure of PIER in response to programmatic changes without regard to staffing ratios.

  Creating new civil service classifications and new pay grades can be accomplished with existing administrative processes.

- Budgets. Vesting budget control with the Program Director requires administrative relief from the Resources Agency and Department of Finance oversight. Examples of budget control include:

  - PIER budget no longer subject to Executive Orders or changes in Department of Finance policies
  - Related to staffing above, the Program Director has the authority to shift funds within an approved budget to meet staffing needs, outside of the BCP process
  - PIER travel budget no longer subject to Executive Orders or changes in Department of Finance policies.

- Procurement. Contract approval currently rests with the Commission. Vesting contract approval with the Program Director will require legislated delegation of

contract approval authority normally reserved for the Commissioners and control agencies.

Legislative exemptions have the advantage of greater permanency, but the disadvantage of being risky (e.g., undesirable provisions being added). If the control agency has the authority, administrative relief from procedures and rules reduces the risks associated with legislation, but the outcomes are not guaranteed. However, the result may be slower, more incremental solutions to the IRP problems. Also, administrative relief can be reversed by changing interpretations of rules, new agency heads and new policy. Examples of steps to implement the Internal Option Concept could include the following:

- Determine nature of exemptions. For proposed actions to obtain exemptions from control agency oversight, determine which exemptions can be obtained administratively, through legislation, or through executive orders. For exemptions requiring administrative actions, determine which control agencies are involved and establish an agency task force to negotiate with control agencies and establish exemptions. For exemptions requiring legislation, establish an agency task force with stakeholders, establish legislative sponsorship in coordination with the IRP, and draft and enact legislation.

- Implement new PIER structure. It is estimated that fully implementing the Internal Option Concept may take up to a year without legislation (according to Administrative Services staff) and 2 – 3 years with legislation.

PIER JPA Concept

Absent an amendment to the PIER enabling legislation, the PIER Joint Powers Authority (JPA) Concept would be able to administer most aspects of the PIER program (further legal analysis is needed before it can be confirmed absolutely) but final responsibility for program decisions would remain with the Energy Commission. There are examples of JPAs that have been formed by state agencies without legislation. The PIER JPA Concept could be implemented through a contract, without legislation, if all funding decisions made by the PIER JPA Concept continued to be approved by the full Commission. Examples of steps to implement a PIER JPA Concept include the following:

- Preliminary approval of the PIER JPA Concept. The Energy Commission would need to obtain preliminary approval and support from the Governor's Office and the Legislature, especially the energy committee chairs, to pursue implementation.

- Development and approval of a PIER JPA Concept Creation Plan. The plan would include a preliminary determination of the extent to which the Energy Commission can delegate authority over the PIER program to another governmental body without legislation, more detailed steps to create a PIER JPA Concept, estimated time to creation, a budget, and a more detailed description of

the PIER JPA Concept. PIER JPA Concept Creation Plan would need to be approved by the Energy Commission with instructions to staff to pursue implementation.

- Selection and approval of the JPA partner(s). It would be necessary to select partner(s) that contribute the appropriate capabilities (e.g., technical expertise, research program management, market connections), as well as flexible contracting and staffing guidelines (e.g., oversight exemption from the Department of General Services, Department of Finance, State Personnel Board, Public Employment Relations Board, Department of Personnel Administration). JPA partner selection would need to be approved by the governing authorities of all partners and by the Governor's Office and the Legislature.

- Development and approval of the PIER JPA Concept charter. Energy Commission staff and JPA partners' staff would develop the charter with cooperation from the Governor's Office and the Legislature. The PIER JPA Concept charter would need to be approved by the Energy Commission and the PIER JPA partner(s). The Department of General Services must authorize the Energy Commission's formation of the PIER JPA Concept.

- Implement the PIER JPA Concept. It is estimated that fully implementing the PIER JPA Concept may take 1 – 2 years without legislation and 2 – 3 years with legislation.

PIER PBC Concept

As with all public benefit corporations, the Energy Commission would need to register the PIER Public Benefit Corporation (PBC) Concept with the Internal Revenue Service and the California Secretary of State to achieve tax-exempt status. It is unclear if new legislation is needed to create the PIER PBC Concept. While a PIER PBC would be able to administer most aspects of the PIER program (further legal analysis is needed before it can be confirmed absolutely), final responsibility for program decisions would remain with the Energy Commission, absent an amendment to the PIER enabling legislation. However, the Energy Commission could contract with a PBC to provide specific, selected program implementation responsibilities without delegating its authority for PIER. Examples of steps to implement a PIER PBC Concept include the following:

- Preliminary approval of the PIER PBC Concept. The Energy Commission would need to obtain preliminary approval and support from the Governor's Office and the Legislature, especially the energy committee chairs, to pursue implementation.

- Development and approval of a PIER PBC Concept Creation Plan. The plan would include a preliminary determination of the extent to which the Energy Commission can delegate authority over the PIER program to a PBC without legislation, more detailed steps to create a PIER PBC Concept, estimated time to

creation, a budget, and a more detailed description of the PIER PBC Concept. Significant uncertainties need to be addressed regarding legislation needed to authorize the Energy Commission to contract with the PIER PBC Concept to provide support services and for the Energy Commission staff to work at the PIER PBC Concept while retaining civil service status. The plan would likely call for simultaneously pursuing legislation and continued planning for the creation of the PIER PBC. The PIER PBC Concept Creation Plan would need to be approved by the Energy Commission with instructions to staff to pursue implementation.

- Development and approval of the PIER PBC Concept articles of incorporation and bylaws. Energy Commission staff would develop the articles of incorporation and bylaws with cooperation from the Governor's Office and the Legislature. The PIER PBC Concept articles of incorporation and bylaws would need to be approved by the Energy Commission and filed with the appropriate authorities.

- Development and approval of enabling legislation. The necessary enabling legislation is drafted by the Energy Commission and passed by the Legislature, signed by the Governor, and takes effect.

- Implement the PIER PBC Concept. It is estimated that fully implementing the PIER PBC Concept may take 1 – 2 years without legislation and 2 – 3 years with legislation.

INTRODUCTION

About This Document

The Independent Review Panel (IRP) for the Public Interest Energy Research (PIER) Program recently issued a report assessing the strengths and weaknesses of the PIER Program (*California Public Interest Energy Research Independent PIER Review Panel Report,* March 2004). The IRP report discusses many aspects of PIER's overall performance, noting that the program had improved since a similar review was conducted in 2001. However, it specifically states that the current organizational structure of PIER within the California Energy Commission (Energy Commission) is not optimal for research, development and demonstration (RD&D) and hinders the ability of PIER to perform as a first-class RD&D organization.

The IRP report identified three alternative organizational constructs for PIER that it thinks could significantly improve the identified problems:

- Internal Re-organization (Separate RD&D Division within the Energy Commission)
- Joint Powers Authority (JPA)
- Public Benefit Corporation (PBC).

The IRP asked the Energy Commission prepare an assessment of these three alternatives and present the results to the IRP by July 27, 2004 for inclusion in the IRP's final report, which will be delivered to the Legislature in early 2005. This report represents the Energy Commission's efforts to prepare such an assessment. This report has not been approved by the full Commission and does not necessarily represent agreement with the IRP's preliminary report.

Two important developments have occurred during the preparation of this report. One is the California Public Utility Commission (CPUC) decision on natural gas RD&D, which could expand the Energy Commission's RD&D responsibilities. The other is finalization of the Governor's California Performance Review, which could potentially reorganize state government, including the Energy Commission. This report does not reflect issues associated with either of these developments.

PIER Legislative Objectives

In 1996, the Legislature established the PIER Program at the Energy Commission, funding the program with payments from investor-owned utility (IOU) ratepayers. Assembly Bill (AB) 1890 was enacted to ensure that the benefits obtained from important public purpose programs, such as public interest energy RD&D, would not be lost in the newly deregulated environment. Starting on January 1, 1998 (and now extended through 2012), Public Utilities Code (PUC) Section 381 required that California's electric investor-owned utilities collect at least $62.5 million annually to fund

energy-related RD&D activities “not adequately addressed by competitive and regulated markets.” In AB 1890, the Energy Commission was authorized to receive and administer these funds.

In September 2002, SB 1038 was signed into law. This bill restated the goal of the PIER Program and requires that the Energy Commission use a portfolio approach to achieve the following goal: “The goal of the program is to provide public value for the benefit of California and its citizens through the development of technologies which will improve environmental quality, enhance system reliability, increase efficiency of energy-using technologies, lower system costs, or provide other tangible benefits.” With its own robust research program, the state can more effectively and persuasively influence federal policies and spending patterns on energy RD&D. When RD&D is coordinated with and guided by state energy goals, the policies become catalysts for funding and implementing new strategies and technology, which in turn drives more effective regulatory policies and market incentives that will keep California’s future looking bright.

To address its goal, the PIER Program has been working to develop information and technologies that address critical public interest needs and can help avoid the next energy crisis. The program brings together parties with differing aims, creates better pathways to market for emerging technologies, and informs policymakers on trends and technical matters. Through its efforts, the PIER Program helps resolve issues and facilitates the development and deployment of technologies with broad public benefit, focusing on public interest concerns not adequately addressed in the private or academic sectors.

In the 2003 Integrated Energy Policy Report (IEPR), the Energy Commission concluded that “California’s energy system appears stabilized for now, but faces critical challenges in the years ahead,” and that targeted research and development is a “necessary means of introducing new, more efficient, and cleaner technologies into the market”. To this end, the PIER Program addresses California energy policies and implementation programs in four key areas:

1. Enhancing energy efficiency, demand-side management, and demand response programs
2. Diversifying electricity supplies by investing in renewable and other clean energy technologies
3. Strengthening California’s energy infrastructure to provide for reliability
4. Continuing California’s environmental stewardship.

California’s energy mix and policies will always differ from that of the nation as a whole, which is why the state must have its own energy RD&D programs. California’s energy policies emphasize energy efficiency, demand response, and renewable energy in contrast with the federal government’s focus on coal and nuclear research. Moreover, PIER focuses on California’s unique environmental, economic, and demographic challenges, allowing state policy makers to craft state-specific solutions to address the state’s energy needs. Without a state-funded program, California would have to rely on energy technologies and solutions developed at the federal level and without specific

considerations of the state's unique resources; range of business needs; diverse geography, climatic regions, and ecosystems; and societal needs.

In summary, the PIER Program is uniquely positioned for solving California's energy problems from an RD&D perspective for the following reasons:

- Close alignment with California's energy and environmental initiatives, policies and implementation programs
- Focus on RD&D to benefit the electricity consumers with no commercial bias
- Effectively leverages its funds through collaboration with other research organizations
- Provides a high return on invested funds
- Addresses California-specific issues and needs not met by federal and other research efforts.

Independent Review Panel

Public Resources Code Section 25620.9(a) directed that an independent panel be established to conduct a comprehensive evaluation of the PIER Program. The evaluation was to include a review of the public value of programs including, but not limited to, such factors as the monetary and non-monetary benefits to public health, the environment of those programs and the benefits of those programs in providing funds for technology development that would otherwise not be adequately funded.

The first PIER Independent Review Panel (IRP) evaluated the PIER Program from February 1999 through March 2001. The findings of this evaluation were provided to the Governor and Legislature in the form of two reports released March 2000 and March 2001. The second IRP started in June 2003 and will evaluate the PIER Program through January 2005. The Energy Commission requested the assistance of the California Council on Science and Technology (CCST) to nominate IRP members and manage the review process. The IRP members were selected because of their competencies in areas necessary to evaluate the PIER Program given their broad experience in RD&D program management and execution. A preliminary report to the Governor and Legislature was submitted in March of 2004, and a final report needs to be submitted no later than June 30, 2005.

Problem Statement

In its March 2004 report, the IRP stated "the PIER Program has significantly improved since the last review in 2001. However, fundamental organizational limitations hinder the ability of PIER to become a first-class R&D organization. The current organizational structure of the Energy Commission is not optimal for R&D." Throughout the report, it specifically identifies problems with the current organizational structure that need to be addressed *(Figure 1)*.

Figure 1: Problem Statements in March 2004 IRP Report

March 2004 IRP Report	Problem Statements (P)
Legislative Objectives and Strategy	
p. 27 and 32	*P1. The CEC is a regulatory agency with a near-term focus.*
Processes	
p. 13 and 17	*P2. The special needs of managing R&D have been achieved primarily through informal arrangements and not by specific organizational structure, which is an important requirement for a first class research program.*
p.19	*P3.* [Staff reductions have] *led to awarding larger research contracts as a means to manage with staff limitations.*
p .19	*P4.*[Staff reductions have lead to] *large-scale outsourcing of blocks of R&D contracts to organizations outside the CEC. This makes it more difficult to guarantee that PIER projects adhere to the CEC goals and PIER objectives.*
p. 26 and 31	*P5. Cumbersome administrative practices*, [such as the contract preparation process, remain a] *major concern.*
p. 27 and 32	*P6. The CEC is a regulatory agency with limited flexibility.*
Resources	
p. 13, 18, 19, and 32	*P7. Civil service requirements and, more recently, budgetary issues have prevented the filling of needed staff positions and hiring of expert* [contract staff].
p. 13 and 19	*P8. PIER may have a lack of "intellectual critical mass" and a severely reduced knowledge base in some important areas.*
p 17-18	*P9. Recent staff and budget cuts within the CEC affected the PIER Program in a manner disproportionate to cuts in other divisions and programs of the CEC.*
p. 27 and 32	*P10. Under the current civil service rules, it is difficult to attract and retain top research managers.*
p.19 and 32	*P11. The extremely limited travel budget for PIER staff hinders staff professional development and key interchanges with staff and stakeholders in other programs, including the U.S. DOE. These constraints severely affect the ability of PIER staff to keep up to date on scientific, technological and policy issues relevant to the PIER Program and to develop collaborative, crosscutting programs.*
Organization	
p. 13 and 27	*P12.* [PIER has yet to] *acquire division status within the CEC with the authority and resources needed by a "high-quality" research program.*
p. 13, 17, and 18	*P13.* [As a contract employee], *the current PIER Program Manager does not have direct control over staffing for the program.*
p. 13 and 18	*P14. The PIER Program Manager does not have the authority to sign research contracts or to manage budgets, because the civil service structure of the CEC does not allow a contractor to take on these responsibilities.*
p. 17 and 31	*P15. The characteristics of the CEC's organizational culture and bureaucracy conflict with the characteristics of an organizational environment that facilitates a superior R&D program.*
p. 18	*P16.* [The PIER Program Manager needs to be formally] *accountable for PIER, and responsible for presenting and defending the program to the CEC, the external oversight agencies, the Legislature, and the Governor.*
p. 14	*P17. There is an urgent need for the CEC to develop a management plan and a formal organizational structure to properly staff and more effectively manage the program.*
p. 27 and 32	*P18. Managers do not have the independence and authority they need to be as effective as possible.*
p. 27 and 32	*P19. The CEC is a regulatory agency with a risk-averse culture.*

The March 2004 preliminary IRP Report devotes significant attention to the roles and responsibilities of the Program Director. There was some ambiguity, however, regarding whether the core problem stems from the status of the Program Director as a contractor or from the authority vested in the position. A subsequent discussion with the panel chair confirmed that the problem stems from authority and the IRP wants full contract, staffing and budget approval to be vested with the Program Director (7/7/04 teleconference).

Analytical Approach

In response to the IRP request, the Energy Commission defined an analytical approach to evaluate the three alternative organizational constructs: a) an internal option within Energy Commission, b) Joint Powers Authority, and c) Public Benefit Corporation. This approach consists of six steps:

1. Identify organizational problem statements in the IRP preliminary report, dated March 2004
2. Identify the guiding principles that make PIER a unique program
3. Identify the attributes of a first-class public interest RD&D organization
4. Develop a concept organization for each of the three alternative organizational constructs that addresses the guiding principles, problem statements and attributes
5. Identify implementation implications for each alternative
6. Compare the organizational concepts based on the priorities used for their design.

All three of the concept organizations were designed according to same set of priorities:

- Meet legislative intent when establishing the PIER Program including retaining strong Energy Commission oversight, linkage with state energy policies and policymakers, and coordination with other state agencies
- Solve problem statements asserted by the IRP report
- Incorporate attributes of a first-class public interest RD&D organization
- Minimize disruption to the PIER Program during transition to a new organizational structure.

The assessment of each organizational concept focused on the implementation requirements to address the guiding principles, the IRP problem statements, and the attributes of a first-class RD&D public interest organization. The report also looks at the impact each concept would have on the Energy Commission.

Guiding Principles

Any PIER organizational structure will need to abide by the guiding principles that make PIER a unique program *(Figure 2)*. These guiding principles are derived from the PIER Program's enabling legislation (e.g., AB 1890, SB90, SB 1194, AB 995, SB 1038) and

the Energy Commission's response to the legislative requirements in implementing the program (e.g., PIER Five Year Research Plan, PIER Vision, PIER Mission, Integrated Energy Policy Report, Energy Action Plan). Staff has ensured that the organizational concepts presented in this report adhere to these guiding principles.

Figure 2: Guiding Principles

Guiding Principles
Integrated with state energy policy
Funds public interest energy research that benefits California electric ratepayers
Complimentary with other public and private sector RD&D efforts and implementation programs
Non-duplicative of private sector research
Clear and manageable program mission, vision and strategic objectives
Conveys high-impact information for decision making to policymakers in a timely manner

Attributes of a First-Class Public Interest RD&D Organization

PIER, as a public interest RD&D program, faces most challenges commonly encountered by both private sector RD&D organizations as well as public interest programs with legislative oversight. PIER needs to stay at the forefront of innovation in the ever-changing energy sector. Moreover, like a public interest program with legislative oversight, PIER needs to conform to public interest organizational and operating principles as defined by the state legislature. For the PIER Program to achieve its stated objectives, it will need to adopt an organizational structure that meets the attributes in each of the elements of a first-class public interest RD&D *(Figure 3)*. These attributes were derived from a combination of comments from the IRP Report and input from PIER staff.

Figure 3: Attributes of a First-Class Public Interest RD&D Organization

Attributes of a First-Class Public Interest RD&D Organization (A)
Legislative Objectives and Strategy
A1. Synergies with other government incentive, standard-setting and regulation programs (IRP Report p. 15 and 17)
A2. Flexibility to fund the short, medium or long-term research that best serves the needs of ratepayers (PIER Staff)
Processes
A3. Flexibility to use a variety of contracting mechanisms (e.g., sole source, competitive solicitation) and retain intellectual property features currently enjoyed by PIER (IRP Report p. 24-26 and PIER Staff)
A4. Risk-taking culture, consistent with program mission (IRP Report p. 39)

A5. Collaborates effectively with state and federal agencies, companies and other research organizations (IRP Report p. 15-16, 17, and 19)
A6. Functional and meaningful program plan and transparent planning process (IRP Report p. 14)
A7. Clearly established budgeting process for RD&D and program operations (IRP Report p. 14)
A8. Creates and tracks value from its RD&D efforts (e.g., public IP, technology commercialization, regulation implementation) (PIER Staff)
Resources
A9. Ability to add or reduce contract staff as workload requires (IRP Report p. 13, 17 and 19)
A10. Ability to attract and retain high quality staff (IRP Report p. 13 and 39)
A11. Program director controls the authorized budget, staff and contract staff (IRP Report p. 13 and 18)
Organization
A12. With approval from the board, the Program Director has the flexibility to reorganize the program in response to changing conditions (PIER Staff)
A13. Program director has authority and accountability for the following, consistent with approved budgets and plans: -Portfolio of program RD&D -Resource allocation in terms of staffing and budgets -Staff development (e.g., training, conference attendance, travel) -Hiring and firing staff -Organization and structure -Contract staffing flexibility -Signing contracts -Presenting and defending program to other interests -Developing the strategic direction of program and strategic relationships (IRP Report p. 18 and 37-38)
A14. Program director is responsible for presenting and defending the program to the CEC, external oversight agencies, the Legislature and the Governor (IRP Report p. 18 and 38)
A15. Program director is accountable for the program's performance (IRP Report p. 18)
A16. Board-level entity provides checks and balances for Program Director (PIER Staff)

Organization of Report

This IRP response report is structured around the three alternative organizational constructs. The next section focuses on the Internal Option Concept. It describes the proposed organizational structure, discusses governance issues, discusses key roles and responsibilities of the Program Director, analyzes required changes to current PIER operating processes, and assesses the implementation implications of having the option address the problem statements in the IRP report as well as the guiding principles and the attributes of a first-class public interest RD&D organization. The following two sections focus on the PIER JPA Concept and the PIER PBC Concept, respectively. The last section of the report provides a comparison of the three organizational concepts.

PIER INTERNAL OPTION

Existing Structure

The Energy Commission has five Commissioners, appointed by the Governor to 5-year rotating terms, who, with a quorum of at least three, can make decisions on behalf of the Commission. The Commission conducts its official business at regularly scheduled Business Meetings held roughly every two weeks. Within statutory limits, the Commission can delegate certain responsibilities.

There is a Policy Committee for Research and Development made up of two Commissioners. This Committee makes decisions on the overall direction and content of the PIER Program and they make recommendations on individual research contracts to the full Commission, which decides whether to support these recommendations at a Business Meeting.

The Executive Director is responsible for the management of Energy Commission staff, and for planning the Commission's budget. Four Deputy Directors, each managing a Division, report to the Executive Director. The vast majority of the Energy Commission staff who work on the PIER Program resides in the Research and Development Office, which is part of the Technology Systems Division (TSD). Fewer than five staff from other divisions manage individual projects part time.

In addition to the four Divisions, the following groups provide support services to the Commission: Office of the Chief Counsel (reports directly to the Energy Commission Chair), Office of Governmental Affairs, Media and Public Communications, Public Adviser's Office (reports directly to the Governor), Hearing Adviser's Office, Information Technology Services Branch, Financial Services Branch and the Human Resources and Support Services Branch.

Program and organization structure within the Commission varies depending on the scope of the program, the level of resources and range of technical expertise involved, and degree of interaction with other programs. In most cases, overall responsibility for major programs is assigned to Deputy Directors while components of such programs or minor programs are assigned to Office Managers. Offices are typically composed of supervisors with responsibility over a group of technical staff, contract managers, project managers, and support staff. Senior technical experts may report either to Deputy Directors or Office Managers. As program managers, the Deputy Directors and/or Office Managers are responsible for program direction, scope and schedule; program staff, operation, and contract resources; and policy recommendations. Committees, composed of two Commissioners, are the decision-makers on policy related to the program. In terms of contracts, the chain of command provides quality assurance functions while actual approval authority rests with the full Commission, subject to applicable control agency oversight.

As a result of the recommendations made by the first IRP, the PIER Program's structure is somewhat different than that of programs in other Energy Commission divisions. For example, the PIER Program Director reports directly to the Executive Director. This means that the position is equivalent to that of the TSD Deputy Director and the Program Director participates in the regular meetings of the Deputy Directors, alongside the Deputy Director for TSD. The PIER Deputy Division Chief reports to the Program Director, and by agreement, is primarily responsible for day-to-day operations of the PIER Program. There are six Program Area Leads who report to the Deputy Division Chief and who are responsible for planning and leading a large portion of the PIER Program. Each Lead shares one of four Supervisors who are responsible for managing the technical staff. Each Supervisor works closely with their Lead in order to provide the resources to accomplish the mission of the respective Program Area. The Supervisors report to the Deputy Division Chief, who is also the acting Office Manager.

Changing the Existing Structure

State personnel, procurement, and contracting practices are established through policies and procedures developed by control and oversight agencies. An effective Internal Option Concept that addresses all of the noted structural problems and attains the attributes of a first-class public interest research organization will require exemptions from oversight of multiple State control agencies, such as:

- The Department of Finance (DOF). DOF provides oversight and control of agency budgets and information technology.

- The Department of Personnel Administration (DPA). The DPA represents the Governor as the "employer" in all matters concerning California State personnel employer-employee relations. As such, they are responsible for all issues related to collective bargaining, including salaries and benefits, job classifications, and training.

- The State Personnel Board (SPB). The SPB is responsible for California's Civil Service System. SPB ensures that the State's civil service system is free from political patronage and that employment decisions are based on merit. The SPB provides a variety of recruitment, selection, classification, appellate, goal setting, training, and consultation services to state departments. The SPB also promotes efficiency and economy in state government and is a leader in efforts to improve and reform civil service practices.

- Public Employment Relations Board (PERB). PERB administers the collective bargaining statutes covering employees of California's public schools, colleges, and universities, employees of the State of California.

- The Department of General Services (DGS) is a large diverse agency that provides a wide variety of services to state agencies. The Energy Commission works closely with the Office of Legal Services (OLS), which is responsible for

contract review and approval on behalf of the state. OLS also provides preventive legal advice for state agencies regarding contracting issues, training on state contracting and leadership for constructive change in state contracting processes.

In addition, changes in civil service classifications, pay scales, employee benefits and rights, etc. will require discussion with the civil service unions currently representing employees at the Energy Commission:

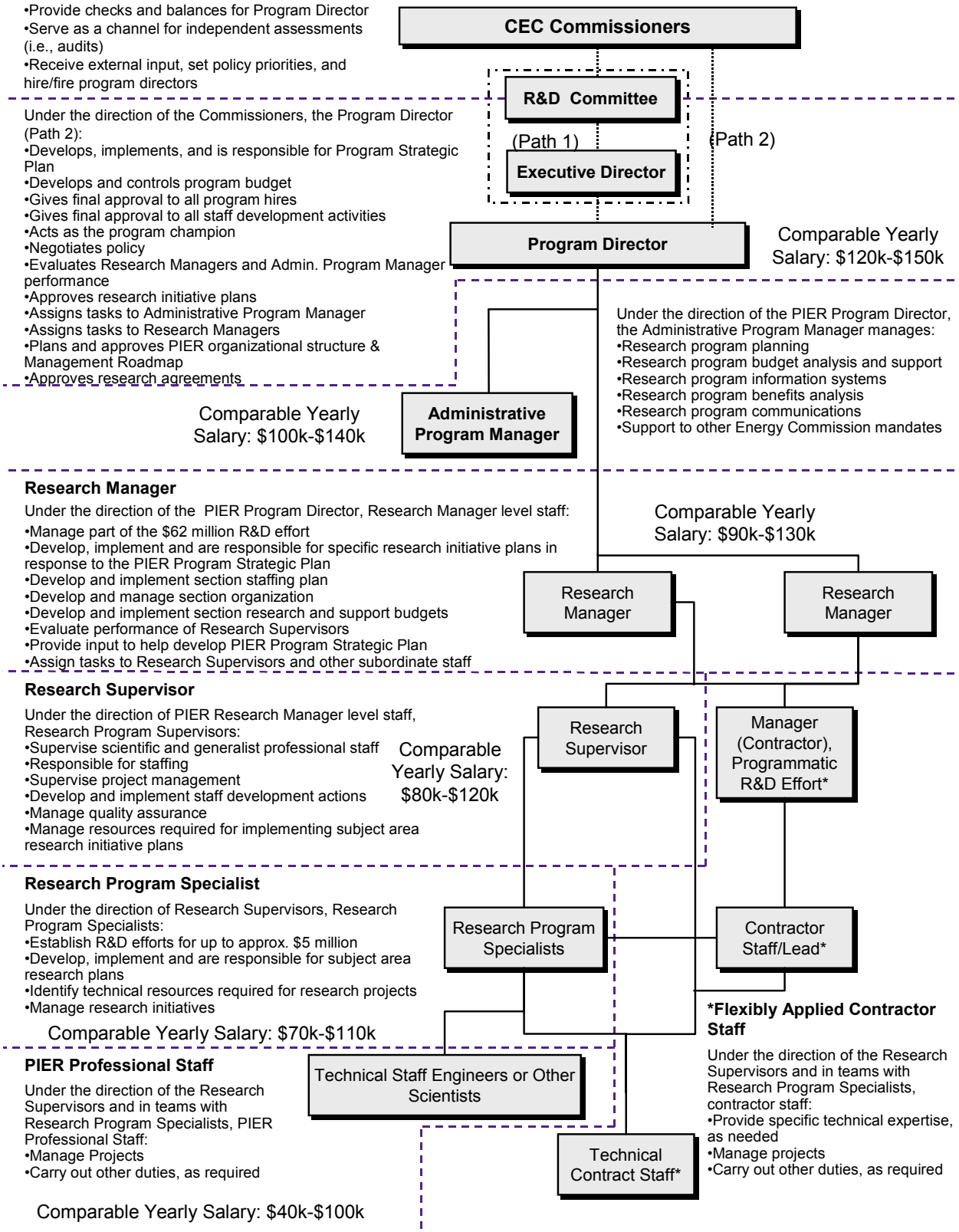
- The California Association of Professional Scientists
- Professional Engineers in State Government
- The California State Employees Association.

These parties constitute the stakeholders involved in the process of legislatively creating the Internal Option Concept.

Internal Option Concept

The Internal Option Concept *(Figure 4)* creates a Research and Development Division within the Energy Commission. It is possible to attain the organizational attributes and solve the problems by a combination of re-organizing the Energy Commission's research structure and implementing administrative, legislative, regulatory and changes to organizational culture.

Figure 4: PIER Internal Option Concept



The approach to developing the organizational structure in Figure 4 began with the information in the IRP report dealing with the roles and responsibilities of the Program Director and the Research Managers. The roles and responsibilities for each organizational stratum were developed using the information from the IRP report and staff knowledge of typical Energy Commission responsibility hierarchies. For instance, the report gave considerable detail concerning the abilities and authority of the Program Director. Less information was provided for the Research Managers and little if any provided for the remaining strata.

The structure in Figure 4 shows two reporting options for the Program Director: reporting through the Executive Director and RD&D Committee to the full Commission (Path 1); and reporting directly to the full Commission (Path 2). In the first option, the PIER Program Director would be under the supervision or administrative direction of the Executive Director in the same manner as Deputy Directors of other programs within the Commission. The R&D Committee would provide policy direction for the PIER program. In the second option, the PIER Program Director would report directly to the full Commission. This relationship would require a change in legislation. Under both options, Research Managers who have responsibility for large portions of the research program report to the Program Director. Research Supervisors report to the Research Managers, manage programmatic efforts in support of the overall program and supervise staff and provide the resources to implement the research initiatives of the Research Managers. Research Program Specialists are responsible for small portions of the research program and lead the team of Technical Staff, Engineers or Scientists who work to implement this portion of the research plans. As needed, Contract Staff can be brought in to assist one or more portions of the Program. The Administrative Program Manager, with responsibility for managing PIER administrative functions such as program planning, budgeting and benefits analysis reports directly to the Program Director. Staff assigned to administrative functions report to the Administrative Program Manager.

To address the IRP's concerns about competitive salaries (attracting and retaining top-quality staff), Energy Commission staff conducted an informal salary survey of the following research organizations:

- New York State Energy Research and Development Authority (NYSERDA)
- Lawrence Berkeley National Laboratories, Environmental Energy Technology Division (LBNL)
- University of California, California Institute for Energy and Environment (CIEE).

Each organization was sent the organizational structure shown in Figure 4 and asked to provide the salaries of persons with responsibilities similar to those depicted. The salary ranges shown in Figure 4 reflect those provided from these research institutions.

With the exception of the PIER Program Director, existing state employee classifications are consistent with the roles and responsibilities in Figure 4. Achieving these roles and responsibilities for the Program Director will require obtaining administrative or

legislative exemptions from several control agencies. In addition, no existing state classifications have salary levels comparable to those shown in Figure 5. Therefore, Figure 4 uses proposed, new classifications that would address both the salary levels and responsibilities of concern in the IRP report.

Figure 5: Results of the Informal Salary Survey

Salary Survey Results					
PIER Strata	**Energy Commission**	**NYSERDA**	**LBNL**	**CIEE**	**Comparable Median**
Program Director	CEA III $96-$106k	Executive Director $120-$150k	Division Director $135-$215k	Program/Exec. Director $150k+	Program Director $120-$150k
Research Manager	ECS III $65-$79k Office Manager I $72 - $79k Office Manager II $79 - $85k	Program Directors $90-$100k	Department Head $145 -$155k	Program Manager $85-$110k	Research Program Manager $90-$130k
Project/ Technical Managers	ECS II $59-$71k	Program Managers $78-$90k	Group Leader $120-145k	Project Manager $75-$85k	Research Supervisor $80-$120k
			Deputy Group Leader $110-$120k		Research Program Specialist $70-$110k
		Project Managers $40-$80k	Scientist and Engineer $90-$120k		Professional Staff $40-$100k

Internal Option Concept Governance

Board level responsibilities would be provided in the Internal Option Concept by the full Energy Commission. The Program Director would receive policy direction from and responsibilities delegated by the Commissioners. Under Path 1, the Commissioners would retain responsibility for the policy decision-making, strategic guidance and approval of annual budgets and individual contracts for the Program. The Executive Director would retain responsibility for the hiring/firing of the Program Director for establishing the overall organizational structure, and coordination between programs. The individual with primary accountability for the PIER Program would be the PIER Program Director. The Commissioners would have certain roles and responsibilities for the Program such as: providing policy and strategic guidance; approving annual budgets, organizational structure, contracting procedures and individual contracts; hiring/firing the Program Director; applying checks and balances (audits, oversight committees); and having the ultimate accountability for the program. In lieu of the broad authority envisioned by the IRP, under Path 1 the program director would have authority comparable to other deputy directors in the Energy Commission.

The governance as suggested by the IRP and shown as Path 2 in Figure 4 is different from the governance of other programs in the Energy Commission, being outside the normal chain of command, in which the Deputy Directors of other divisions report to the Executive Director.

Internal Option Concept Operating and Support Processes

The Energy Commission is subject to the Ralph M. Brown Act. Also, the Energy Commission must comply with the California Public Records Act governing disclosure of public documents, along with the Fair Political Practices Act prohibiting conflicts of interest and requiring periodic financial interest disclosures. Chapter 7.1 in the Warren-Alquist Act contains the enabling legislation that establishes the goals, requirements and flexibilities for the PIER Program. There are several flexibilities related to contracting, the most notable of which concerns making sole-source awards. The Internal Option Concept will maintain and seek to enhance these flexibilities.

The Internal Option Concept assumes that legislative and policy changes have been obtained that grant the Program Director the authority recommended by the IRP, and that the PIER Program obtains the relief it needs from a variety of administrative constraints. For example, under Path 2 the Program Director will have the authority, granted in legislation and delegated by the Commission, to approve contracts; the Program no longer will be subject to Executive Order hiring freezes and the Program will be exempt from certain civil service requirements such as staffing ratios. In addition, new classifications will have been approved that provide for the combination of responsibility and compensation suggested by the IRP's report.

These changes in authority would allow the PIER Internal Option to have the flexibility required to meet the IRP's characterization of a first-class R&D organization to freely enter into research and technical support contracts, as well as manage permanent and contract staff as the Program Director deems appropriate.

Assessment of the Internal Option Concept

As the analysis shows (*Figures 6 – 8*), the PIER Internal Option Concept addresses all guiding principles, IRP problem statements and attributes of a first-class RD&D public interest organization. In order to successfully implement this option, substantive, and in some cases unique changes need to be made in legislation, regulation or policy related to contracting, budgeting or personnel practices.

Figure 6: Implementation Requirements for PIER Internal Option Concept to Address Guiding Principles

PIER Guiding Principles	Implementation Needed	
	Solutions	**Outstanding Issues**
Legislative Objectives and Strategy		
Integrated with state energy policy	Administration of the program within the Energy Commission ensures integration with other Commission programs and state energy policy	
Funds public interest energy research that benefits California electric ratepayers	The internal option will continue to embody this principle	

Complimentary with other public and private sector RD&D efforts and implementation programs	The internal option will continue to embody this principle	
Non-duplicative of private sector research	The internal option will continue to embody this principle	
Clear and manageable program mission, vision and strategic objectives	The internal option will continue to embody this principle	
Conveys high-impact information for decision making to policymakers in a timely manner	Administration of the program within the Energy Commission provides the best access to the policy makers and their interests and needs	

The Internal Option Concept addresses all of the guiding principles. The IRP has recommended that the Program Director be granted responsibilities not normally given to one person at the Energy Commission. The Career Executive Assignment (CEA) positions within the state may provide the authority and nearly the compensation recommended by the IRP. The Energy Commission may be required by the Department of Personnel Administration (DPA) to justify the use of an appropriate, high level CEA position. This process takes six to nine months and does not have a guaranteed outcome. In addition, it will be necessary to seek relief from other constraints to make operational the responsibilities granted to the Program Director. These additional changes are discussed in the sections that follow.

Figure 7: Implementation Requirements for PIER Internal Option Concept to Address IRP Problem Statements

IRP Problem Statements	Implementation Needed	
	Solutions	**Outstanding Issues**
Legislative Objectives and Strategy		
P1. The CEC is a regulatory agency with a near-term focus.	Provide autonomy to the program within the Energy Commission	Individual programs are not typically granted autonomy within their host agency. The Legislature and most state agencies tend to have a near-term focus.
Processes		
P2. The special needs of managing R&D have been achieved primarily through informal arrangements and not by specific organizational structure, which is an important requirement for a first class research program.	The internal option creates a Program Director position in its organizational structure, clearer organizational relationships and a separate RD&D division	
P3. [Staff reductions have] led to awarding larger research contracts as a means to manage with staff limitations.	Initiate Budget Change Proposals to increase staffing. Obtain administrative or legislative exemptions from control agency oversight regarding staffing restrictions and reductions	Requires getting BCPs approved If legislation is sought, requires support by the appropriate control agencies

P4. [Staff reductions have lead to] large-scale outsourcing of blocks of R&D contracts to organizations outside the CEC. This makes it more difficult to guarantee that PIER projects adhere to the CEC goals and PIER objectives.	Obtain administrative or legislative exemptions that allow the hiring of temporary staff or specialized expertise Initiate Budget Change Proposals to increase staffing Obtain administrative or legislative exemptions from control agency oversight regarding staffing restrictions and reductions	If legislation is sought, requires support by the appropriate control agencies Requires getting BCPs approved If legislation is sought, requires support by the appropriate control agencies
P5. Cumbersome administrative practices, [such as the contract preparation process, remain a] major concern.	Continue managerial focus on changes that improve program support and administrative practices (e.g. surveying PIER contractors and modeling successful processes from other agencies or institutions)	Certain changes will require support by the appropriate control agencies
P6. The CEC is a regulatory agency with limited flexibility.	Obtain administrative or legislative exemptions that provide flexible contracting, staffing and budgeting	If legislation is sought, requires support by the appropriate control agencies
Resources		
P7. Civil service requirements and, more recently, budgetary issues have prevented the filling of needed staff positions and hiring of expert [contract staff].	Obtain administrative or legislative exemptions that allow the hiring of temporary staff or specialized expertise	If legislation is sought, requires support by the appropriate control agencies
P8. PIER may have a lack of "intellectual critical mass" and a severely reduced knowledge base in some important areas.	Develop expertise in current staff. Attract high level expertise from the outside. Initiate Budget Change Proposals to increase staffing Obtain administrative or legislative exemptions from control agency oversight regarding staffing restrictions and reductions	Requires getting BCPs approved If legislation is sought, requires support by the appropriate control agencies
P9. Recent staff and budget cuts within the CEC affected the PIER Program in a manner disproportionate to cuts in other divisions and programs of the CEC.	Obtain administrative or legislative exemptions from control agency oversight regarding, budgeting and staffing restrictions and reductions	If legislation is sought, requires support by the appropriate control agencies
P10. Under the current civil service rules, it is difficult to attract and retain top research managers.	Better targeting of recruitment efforts. Utilize or create classifications that attract top research managers, offering compensation competitive with other public research organizations.	These classifications require formal approval by SPB Requires getting BCPs approved
P11. The extremely limited travel budget for PIER staff hinders staff professional development and key interchanges with staff and stakeholders in other programs, including the U.S. DOE. These constraints severely affect the ability of PIER staff to keep up to date on scientific, technological and policy issues relevant to the PIER Program and to develop collaborative, crosscutting programs.	PIER Program Director controls the travel budget. This level of authority requires obtaining administrative or legislative exemptions from executive orders and control agency oversight regarding training and travel.	At a minimum, this legislation requires support from DOF
Organization		
P12. [PIER has yet to] acquire division status within the CEC with the authority and resources needed by a "high-quality" research program.	The internal option provides division status for the program	Division status, including changes to staffing ratios and creating new classifications will require Commission reorganization and approval by DPA
P13. [As a contract employee], the current PIER Program Manager does not have direct control over staffing for the program.	The internal option creates a Program Director position (CEA or IJE) in its organizational structure with the special authorities envisioned by the IRP	The staffing authorities envisioned require legislation supported by the appropriate control agencies

P14. The PIER Program Manager does not have the authority to sign research contracts or to manage budgets, because the civil service structure of the CEC does not allow a contractor to take on these responsibilities.	The internal option creates a Program Director position in its organizational structure with the special authorities envisioned by the IRP	Path 1 modification shifts responsibilities from the Program Director to the Executive Director and the R&D Committee (page 18). The signature and budgeting authorities envisioned under Path 2 require legislation supported by the appropriate control agencies
P15. The characteristics of the CEC's organizational culture and bureaucracy conflict with the characteristics of an organizational environment that facilitates a superior R&D program.	Generally addressed by other solutions	Further analysis is needed to identify issues. May need to change internal processes, procedures and organizational culture.
P16. [The PIER Program Manager needs to be formally] accountable for PIER, and responsible for presenting and defending the program to the CEC, the external oversight agencies, the Legislature, and the Governor.	The internal option delegates authority to the Program Director by the Energy Commission	
P17. There is an urgent need for the CEC to develop a management plan and a formal organizational structure to properly staff and more effectively manage the program.	This is currently a priority for the Commission and the essence of this analysis	Requires previously identified changes and exemptions
P18. Managers do not have the independence and authority they need to be as effective as possible.	The internal option provides for a research manager classification that reports to the Program Director	This classification requires approval by DPA
P19. The CEC is a regulatory agency with a risk-averse culture.	Generally addressed by other solutions	Further analysis is needed to identify issues. May need to change internal processes, procedures and organizational culture.

The Internal Option Concept addresses problems identified by the IRP. Three prominent problems are:

1. Division status for the Program
2. Enhanced roles and responsibilities of the Program Director
3. Control over a variety of administrative functions including budgets, hiring, contracting and travel.

Under the Internal Option Concept, the PIER Program will acquire the division status identified in number 1 above. Establishing an R&D division will require a Commission reorganization change and approval from the Department of Personnel Administration. Full implementation of the proposed structure will also require approval from control agencies for new classifications, staffing ratios and salaries shown in Figure 4. For example, this process with DPA takes six to nine months and does not have a guaranteed outcome.

As mentioned in Figure 6, the position of Program Director will need to be created. It will require several steps to grant the Program Director the roles and responsibilities recommended by the IRP in number 2 above. These responsibilities include management of budgets, contracts and grants, human resources, business services and being a signature party to decisions that affect the Program. It will be necessary to obtain administrative and legislative exemptions from several control agencies to allow the Program Director to fully implement the responsibilities assigned to this classification.

One of the most important responsibilities the IRP recommended is the delegation of authority to approve contracts and grants to the PIER Program Director. This is what we understand the IRP meant by the authority to sign research contracts. The Chief Counsel's office has provided an opinion that unless the Energy Commission's legislative mandate is changed, the Energy Commission does not have the ability to delegate contract approval authority. Several attempts have been made to enable delegation of contracting authority, both at the Commission level and for the PIER Program. These were brought to the Legislature but were not approved. To meet the desires of the IRP, the Energy Commission needs to acquire this ability through legislative change. Procedures will still need to be worked out with DGS.

There are several hurdles to overcome before the PIER Program will be able to control the administrative functions identified in number 3 above including: delegation of responsibility for budgets, the processing of contracts and grants, human resources, media and communications, governmental affairs, information technology and business services decisions. Some changes need to be made to internal policies and procedures (media and communications, governmental affairs and information technology) in order for the Program Director to have the responsibility and authority recommended by the IRP. Unless administrative exemptions are granted, other changes will require legislation (budgets, processing contract and grants, and human resources) that exempts the Energy Commission and the PIER Program from control agency oversight.

Figure 8: Implementation Requirements for PIER Internal Option Concept to Address Attributes of a First-Class Public Interest RD&D Program

Attributes of a First-Class Public Interest RD&D Organization	Implementation Needed	
	Solutions	Outstanding Issues
Legislative Objectives and Strategy		
A1. Synergies with other government incentive, standard-setting and regulation programs	This authority currently exists and the internal option retains these synergies	
A2. Flexibility to fund the short, medium or long-term research that best serves the needs of ratepayers	This authority currently exists and this flexibility is retained in the internal option	
Processes		
A3. Flexibility to use a variety of contracting mechanisms (e.g., sole source, competitive solicitation) and retain intellectual property features currently enjoyed by PIER	This authority currently exists and this flexibility will be retained in the internal option	
A4. Risk-taking culture, consistent with program mission	The internal option's exemptions, abilities and leadership will facilitate establishing this cultural change	These changes may conflict with other parts of the Energy Commission
A5. Collaborates effectively with state and federal agencies, companies and other research organizations	The internal option's exemptions and authorities will facilitate these collaborations	Requires exemptions from executive orders and DOF oversight to control the travel budget
A6. Functional and meaningful program plan and transparent planning process	This attribute is embodied in the internal option	
A7. Clearly established budgeting process for RD&D and program operations	This attribute is embodied in the internal option	Exercising control over the Program's budget requires exemptions from several control agencies

A8. Creates and tracks value from its RD&D efforts (e.g., public IP, technology commercialization, regulation implementation)	This authority currently exists and will be retained in the internal option	
Resources		
A9. Ability to add or reduce contract staff as workload requires	Internal option attains this attribute	Requires exemptions from several control agencies
A10. Ability to attract and retain high quality staff	Internal option attains this attribute	Requires exemptions from several control agencies
A11. Program director controls the authorized budget, staff and contract staff	Internal option attains this attribute	Requires exemptions from several control agencies
Organization		
A12. With approval from the board, the Program Director has the flexibility to reorganize the program in response to changing conditions	The flexibility envisioned by the IRP suggests the need for legislation to supercede requirements for staffing ratios and organization structure	If legislation is sought, requires support by the appropriate control agencies
A13. Program director has authority and accountability for the following, consistent with approved budgets and plans:		
-Portfolio of program RD&D	This authority currently exists and will be retained in the internal option.	
-Resource allocation in terms of staffing and budgets	Obtain administrative or legislative exemptions from control agency oversight regarding, budgeting and staffing restrictions and reductions	If legislation is sought, requires support by the appropriate control agencies
-Staff development (e.g., training, conference attendance, travel)	PIER Program Director controls the travel budget. This level of authority requires obtaining administrative or legislative exemptions from executive orders and control agency oversight regarding training and travel.	At a minimum, this legislation requires support from DOF
-Program staffing	The internal option creates a Program Director position in its organizational structure with the special staffing authority recommended by the IRP	The staffing authority envisioned by the IRP requires legislation supported several control agencies
-Organization and structure	The flexibility envisioned by the IRP suggests the need for legislation to supercede control agency oversight.	If legislation is sought, requires support by the appropriate control agencies
-Contract staffing flexibility	Obtain administrative or legislative exemptions that allow the hiring of temporary staff or specialized expertise	If legislation is sought, requires support by the appropriate control agencies
-Signing contracts (approval)	The internal option creates a Program Director position in its organizational structure with the authority to approve contracts	The approval authority envisioned by the IRP requires legislation supported by the appropriate control agencies
-Presenting and defending program to other interests	The internal option will continue to embody this attribute	
-Developing the strategic direction of program and strategic relationships	The internal option will continue to embody this attribute	
A14. Program director is responsible for presenting and defending the program to the CEC, external oversight agencies, the Legislature and the Governor.	The internal option delegates authority to the Program Director by the Energy Commission	
A15. Program director is accountable for the program's performance	The internal option will continue to embody this attribute	
A16. Board-level entity provides checks and balances for Program Director	The existing Commission will provide this function	

Of the three options, the Internal Option Concept provides the clearest connection to the State of California's energy policy. Legislative and policy changes, including but not limited to those discussed in the previous section will need to be made for the Internal Option to have the other attributes of a first-class public interest RD&D program. The PIER Internal Option Concept appears to have the fewest immediate negative impacts on the Energy Commission. The Internal Option will add staff and responsibility to the Energy Commission. It will be necessary to get approval from DPA and SPB to create the proposed PIER division, which may also include getting approval for a reorganized Energy Commission. As envisioned, PIER will have administrative processes and procedures that differ from the rest of the Commission. There will be a need for administrative support staff to learn the processes and procedures that are unique to PIER. This may cause a burden on the Energy Commission to provide training for the administrative support staff assigned to PIER.

Summary Discussion of the Internal Option Concept

The analysis shows that the PIER Internal Option Concept follows PIER guiding principles, addresses all the problems that the IPR identified with the PIER Program, as well as covers all attributes of a first-class public interest RD&D organization.

The biggest advantage of the Internal Option Concept is that it provides the closest relationship between the RD&D program and state energy policy and implementation programs. As a part of state government and the policy and program agency, it can best be used to inform and respond to policy development and program design. Of the three options, the Internal Option imposes the least disruption on the PIER Program during the transition period. However, there are several hurdles to overcome in order to implement this option, many with long processes that have uncertain outcomes. To obtain the higher levels of authority recommended by the IRP will require legislative and policy changes including exemption to oversight from several state agencies and creating new classifications (e.g., responsibilities, supervision ratios, compensation) for PIER staff. Given the powers vested in the Program Director, there could be staff displacement.

JOINT POWERS AUTHORITY (JPA) OPTION

Description of JPA Option

In the mid 1970's, the California Legislature amended the Government Code to add the ability for two or more public agencies to join together, under a joint powers authority (JPA), to provide more effective or efficient government services or to solve a service delivery problem. According the California Association of Joint Powers Authorities (CAJPA), various state agencies, over 58 counties, 471 cities, 1000 school districts and well over 3500 special districts in California have formed JPAs.

In general, JPAs can be formed for nearly any conceivable public purpose. The benefits sought through a JPA are different for every group of organizations. Some JPAs are formed for risk management purposes, where member organizations pool their assets to promote risk control and pay claims against member entities. Other JPAs are formed to finance infrastructure development or to manage research activities. JPAs are also formed to achieve operating flexibility (e.g., in budgeting, contracting, and/or staffing). As a separate legal entity, a JPA is permitted to adopt its own rules and regulations. Therefore, even though a JPA made up of a city and a county elects to follow the restrictions applicable to the city member, the JPA is not required to follow the specific rules and regulations adopted by the city. Rather, the JPA is required to follow only those restrictions imposed upon the city under state law.

An example of a JPA formed to achieve operating flexibility in addition to another purpose is the California Fair Services Authority (CFSA) which provides risk pooling services to nearly 70 California fair organizations and which has a state agency as one of its member entities, has elected to follow the restrictions imposed on a county member. Therefore, CFSA is not required to obtain Department of General Services' approval when it enters into contracts, even if those contracts otherwise would have required such approval when entered into individually by the state agency member. While no legislation is needed for public agencies to enter into a JPA, CFSA requested legislative approval for two special reasons. First, to allow the California Department of Food and Agriculture to enter the JPA on behalf of the 54 district agricultural associations and 2 citric fruit fairs in order to avoid having to submit the JPA charter to each and every board for approval. Second, to allow the Counties to enter the JPA on behalf of non-profit associations that manage the county fairs. This was necessary because the non-profit associations are not governmental entities and, therefore, cannot legally join a JPA on their own.

Another example of a JPA that provides operating flexibility is the Mountains Recreation and Conservation Authority (MRCA). The MRCA is a local partnership between the Santa Monica Mountains Conservancy, which is a state agency established by the Legislature, and the Conejo Recreation and Park District and the Rancho Simi Recreation and Park District, both of which are local park agencies established by the vote of the people in those communities. The JPA agreement designates the park districts' restrictions as the restrictions applicable to the JPA. As a consequence, even

though the Santa Monica Mountains Conservancy is required to obtain approval of the State Public Works Board before acquiring land, the MRCA is not required to obtain such approval because no such requirement applies to the park districts' acquisition of land. The MRCA JPA did not require legislation, nor did the Santa Monica Mountains Conservancy require legislative approval to enter into the MRCA JPA.

An example of a research oriented JPA is the Southern California Coastal Water Research Project Authority (SCCWRP). This agency is focused on gathering the necessary scientific information so that sewage and storm water dischargers can effectively and cost-efficiently, protect the Southern California marine environment. The SCCWRP is also an example of the flexibility granted to a JPA when forming its governing board. The four largest sewage dischargers (OC Sanitation District, LA County Sanitation District, City of LA Bureau of Sanitation, and San Diego Metro Wastewater Department) contribute $300,000 a year each to the JPA, while two storm water dischargers (Ventura County Watershed Protection District and LA County Department of Public Works) contribute $75,000 a year each. However, SCCWRP is governed by a commission controlled by regulators and not by the JPA funding members, as defined by the funding members themselves. The regulators (three regional water quality control boards, the State Water Resources Control Board, and the EPA Region IX) have five voting commissioners while the four sewage dischargers have four voting commissioners. The two storm water dischargers, who fund at a lower level, have non-voting commissioners.

SCCWRP receives 1/3 of its budget from member fees and 2/3 of its budget from research contracts and grants. It has a 35 person staff and performs 70% of its research internally. The commission approves a high-level research plan and operating budget. The executive director manages staffing, budget issues and research activities, periodically reporting the financial status to the commission. No legislation was needed for the state agency members to participate in SCCWRP.

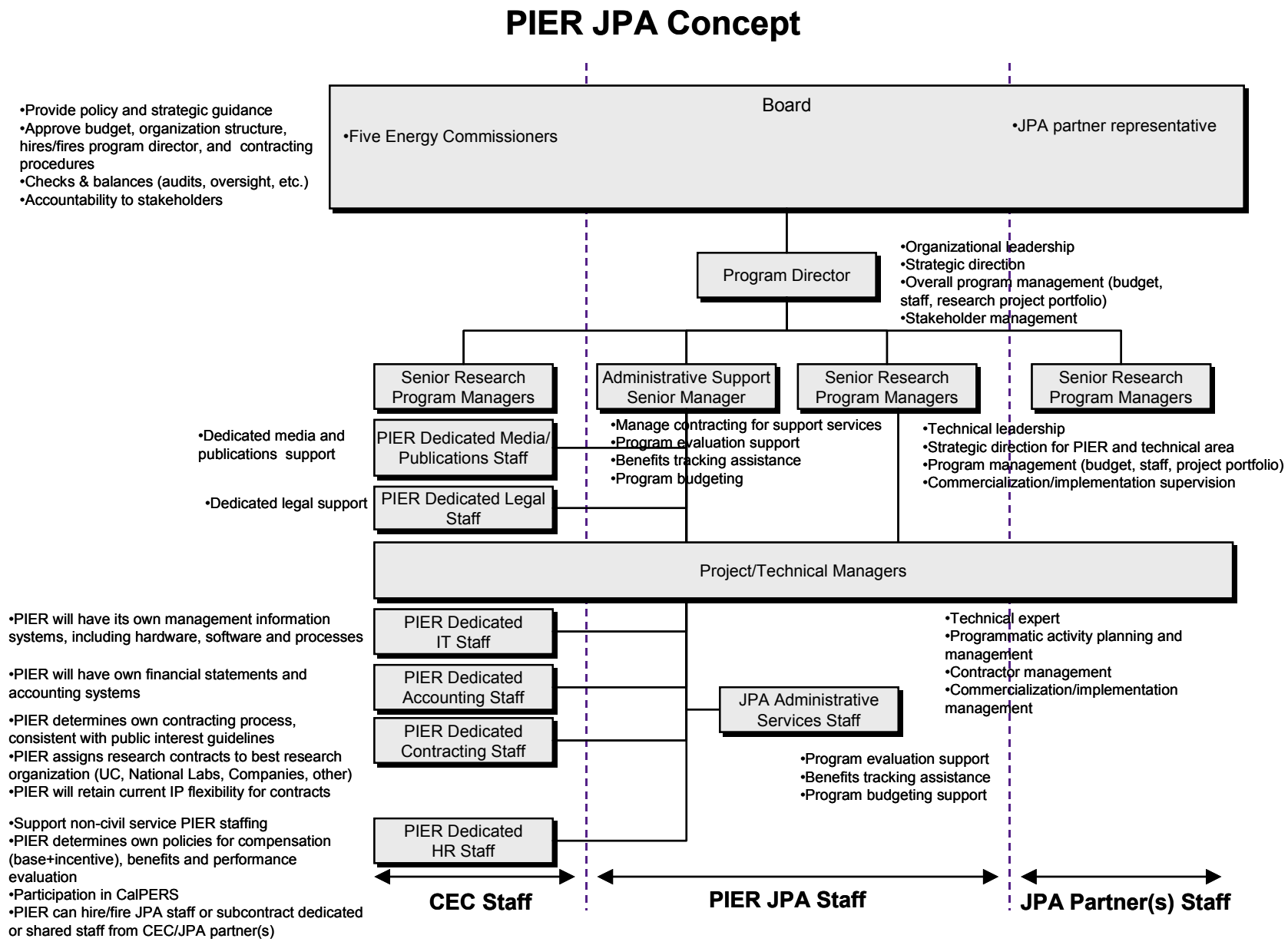
An example of an energy infrastructure JPA is the Transmission Agency of Northern California (TANC). It is comprised of 15 members with electric utility systems, including the California cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara and Ukiah, as well as the Sacramento Municipal Utility District, the Modesto Irrigation District, the Turlock Irrigation District and the Plumas-Sierra Rural Electric Cooperative. No legislation was needed for any of the members to participate in the JPA. TANC was established in 1984 to plan, design and construct the California-Oregon Transmission Project, a 340-mile, 500-kV AC transmission line between southern Oregon and central California. Once the initial project was completed, TANC's primary purpose evolved to provide ongoing electric transmission or other facilities, including real property and rights of way, for its members use. The JPA share allocation and corresponding funding was determined based on the electric loads of each utility. The JPA is governed by a commission, which consists of one representative of each of the members, with votes weighted by the respective percentage of shares owned by the each utility. TANC has no employees, with all functions subcontracted to

third party providers. Maury Kruth, from Navigant Consulting, currently serves as the Executive Director.

PIER JPA Concept

The PIER JPA Concept *(Figure 9)* consists of a high-level definition of the governing board/commission, as well as key program management and support positions. While the IRP identified the University of California as a potential partner, the PIER JPA Concept does not specifically name the partner(s). If the JPA option is selected as the best organizational structure for the PIER Program, further assessment will be required to identify the JPA partner(s) who will contribute the appropriate capabilities (e.g., technical expertise, research program management, and market connections), as well as flexible contracting and staffing guidelines (i.e., oversight exemption from the Department of General Services, Department of Finance, State Personnel Board, Public Employment Relations Board, and Department of Personnel Administration).

Figure 9: PIER JPA Concept



PIER JPA Concept Governance

A JPA has a governing body, typically called a board of directors or a commission. This board can take any form and function the JPA members want it to take. While JPA members need to be a public agency, the JPA could designate board members from public or private organizations, including Investor Owned Utilities, Private Research Organizations, Independent Lawyers and Independent Consultants. The JPA can distribute voting rights among board members in any way it deems appropriate. It also has the ability to create board level committees (e.g., research planning, finance, compensation and audit). In addition, the JPA must have a treasurer.

The PIER JPA Concept has a board of directors comprised of the five Energy Commissioners and one or more representatives from the JPA partner(s). The five Energy Commissioners would constitute a majority of the board. This structure would allow the Energy Commission (and thus the Legislature) to retain oversight of the PIER Program and keep the PIER Program closely linked with California energy policies and governmental programs. The board would have the same roles and responsibilities that were defined in the Internal Option Concept:

- Providing policy and strategic guidance
- Approving budgets, organizational structure, and contracting procedures
- Hiring and firing the Program Director
- Applying checks and balances (e.g., audits, oversight committees)
- Retaining accountability for the program to stakeholders.

A JPA has independent status under public law, and a liability of the JPA cannot be transferred to its member agencies. JPA board members have the same liability immunity as board members in public agencies. However, the JPA is still required to acquire liability insurance for its board members, which in this case would be relatively inexpensive.

The PIER JPA Concept also defines the position of the Program Director, which would have control over the operations of the program. The Program Director's roles and responsibilities include:

- Providing leadership and strategic direction to the organization
- Managing the program (e.g., budgeting, staffing, research portfolio)
- Dealing with external stakeholders (e.g., Legislature, Governor, state energy agencies).

The PIER JPA Concept's governance structure can take any form and function the JPA partners want it to take. It could have a board of directors comprised of the five Energy Commissioners and one or more representatives from the JPA partner(s). A variation of that board could include fewer Commissioners. The position of Program Director can also have variations in its title, authorities and responsibilities.

PIER JPA Concept Operating and Support Processes

JPAs are subject to either the Ralph M. Brown Act or the Bagley-Keene Open Meeting Act, depending on whether the JPA is local or statewide in nature. Also, JPAs must comply with the California Public Records Act governing disclosure of public documents and with the Fair Political Practices Act prohibiting conflicts of interest and requiring periodic financial interest disclosures. JPAs have the flexibility to choose among the less restrictive guidelines for contracting and staffing from its member organizations. In some cases, JPAs might include a member for the expressed purpose of applying the staffing or contractual flexibility that belongs to that member to the JPA.

The PIER JPA Concept assumes that the JPA partner would not require its contracts to be approved by the Department of General Services, nor its staff to follow State civil service requirements (e.g., classifications, pay ranges, staffing ratios), or be subject to Executive Order hiring freezes such as the Energy Commission currently is subject. This would allow the PIER JPA to have the flexibility required by a first-class RD&D organization to freely enter into research and technical support contracts, as well as manage permanent and contract staff as the PIER JPA Board and Program Director deem appropriate.

A JPA can be organized and staffed in any way the member entities wish – by existing employees of one or more of the member entities, by its own employees, by contracts with private persons or entities (including nonprofits), or by any combination thereof. For example, in the case of the CFSA, discussed above, the JPA is fully staffed with its own employees. It has a full package of benefits comparable to its state and local member entities, and it has its own contract with the Public Employees Retirement System (PERS) for health and retirement benefits. As a general matter, employees joining CFSA from other public agencies under contract with PERS can transfer their PERS benefits and credits to CFSA.

The PIER JPA Concept would employ staff from the Energy Commission and from its JPA partner(s) in addition to having its own employees. By employing Energy Commission staff that currently work in the PIER Program, the PIER JPA Concept would retain the staff that the IRP has praised for its “strong knowledge base” and “motivation”. This would minimize disruption to the PIER Program during the transition from the Energy Commission to the JPA. With this core Energy Commission staff, the PIER JPA Concept would be able to “hit the ground running” from the very first day of its existence. The PIER JPA should be physically located within the Energy Commission and nearby buildings to facilitate close contact with other Energy Commission staff and the Commissioners. This would retain the PIER Program’s close link with California’s energy policies and governmental energy programs.

Although a JPA has the ability to hire its own administrative support staff, Figure 8 shows that the PIER JPA Concept would contract with the Energy Commission to provide the same support functions it currently provides the PIER Program, including contract processing, legal support, media support, publications, accounting, human resources and information technology. These services would be done under the PIER

JPA Concept rules, however, not the state's. Contracting back to the Energy Commission would minimize disruption to the PIER Program during transition by avoiding the need to develop support services from scratch immediately. If, however, the Energy Commission decided it did not want to perform the administrative functions, the PIER JPA would need to choose among hiring internal staff, subcontracting administrative staff from JPA partners or outsourcing to another third party.

Assessment of PIER JPA Concept

As the analysis shows *(Figures 10 – 12)*, the PIER JPA Concept addresses all guiding principles, IRP problem statements and attributes of a first-class RD&D public interest organization. Once the JPA agreement is put in place, there are not significant legislative or regulatory changes required. The implementation effort would be centered on establishing the JPA agreement itself.

Figure 10: Implementation Requirements for PIER JPA Concept to Address Guiding Principles

PIER Guiding Principles	Implementation Needed	
	Solutions	**Outstanding Issues**
Legislative Objectives and Strategy		
Integrated with state energy policy	PIER JPA Concept allows program to follow this principle and for CEC commissioners to review compliance.	
Funds public interest energy research that benefits California electric ratepayers	Would be a stated purpose in the JPA agreement	
Complimentary with other public and private sector RD&D efforts and implementation programs	PIER JPA Concept allows program to follow this principle and for CEC commissioners to review compliance	
Non-duplicative of private sector research	PIER JPA Concept allows program to follow this principle and for CEC commissioners to review compliance	
Clear and manageable program mission, vision and strategic objectives	PIER JPA Concept allows program to follow this principle and for CEC commissioners to review compliance	
Conveys high-impact information for decision making to policymakers in a timely manner	PIER JPA Concept allows program to follow this principle and for CEC commissioners to review compliance	

Figure 11: Implementation Requirements for PIER JPA Concept to Address IRP Problem Statements

IRP Problem Statements	Implementation Needed	
	Solutions	**Outstanding Issues**

Legislative Objectives and Strategy		
P1. The CEC is a regulatory agency with a near-term focus.	PIER JPA Concept takes PIER outside CEC	
Processes		
P2. The special needs of managing R&D have been achieved primarily through informal arrangements and not by specific organizational structure, which is an important requirement for a first class research program.	PIER JPA agreement would provide formal authority to Program Director over the organizational structure	
P3. [Staff reductions have] led to awarding larger research contracts as a means to manage with staff limitations.	PIER JPA agreement would provide the needed flexibility to increase the number of staff required to adequately manage the program	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P4. [Staff reductions have lead to] large-scale outsourcing of blocks of R&D contracts to organizations outside the CEC. This makes it more difficult to guarantee that PIER projects adhere to the CEC goals and PIER objectives.	PIER JPA agreement would provide the needed flexibility to increase the number of staff required to adequately manage the program	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P5. Cumbersome administrative practices, [such as the contract preparation process, remain a major concern.	PIER JPA agreement would provide the needed flexibility to change administrative practices	
P6. The CEC is a regulatory agency with limited flexibility.	PIER JPA Concept takes PIER outside CEC into a new organization with more operational flexibility	
Resources		
P7. Civil service requirements and, more recently, budgetary issues have prevented the filling of needed staff positions and hiring of expert [contract staff].	PIER JPA Concept would not have the civil service requirements	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P8. PIER may have a lack of "intellectual critical mass" and a severely reduced knowledge base in some important areas.	PIER JPA Concept will not have current contract staff restrictions	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P9. Recent staff and budget cuts within the CEC affected the PIER Program in a manner disproportionate to cuts in other divisions and programs of the CEC.	PIER JPA Concept would shield PIER from budget cuts	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P10. Under the current civil service rules, it is difficult to attract and retain top research managers.	PIER JPA Concept would not have the civil service requirements for positions it filled with its own staff	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P11. The extremely limited travel budget for PIER staff hinders staff professional development and key interchanges with staff and stakeholders in other programs, including the U.S. DOE. These constraints severely affect the ability of PIER staff to keep up to date on scientific, technological and policy issues relevant to the PIER Program and to develop collaborative, crosscutting programs.	PIER JPA Concept would not have travel restrictions on its staff	Requires JPA partner's legislative or administrative exemption from DOF oversight
Organization		
P12. [PIER has yet to] acquire division status within the CEC with the authority and resources needed by a "high-quality" research program.	PIER JPA Concept provides the authority and makes available the resources required without restrictions	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P13. [As a contract employee], the current PIER Program Manager does not have direct control over staffing for the program [and cannot hire or fire employees].	PIER JPA Concept provides the Program Director with authority over staffing issues	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P14. The PIER Program Manager does not have the authority to sign research contracts or to manage budgets, because the civil service structure of the CEC does not allow a contractor to take on these responsibilities.	The PIER JPA Concept allows the Program Director to sign research contracts	
P15. The characteristics of the CEC's organizational culture and bureaucracy conflict with the characteristics of an organizational environment that facilitates a superior R&D program.	The PIER JPA Concept would separate PIER from the CEC thereby eliminating conflict	

P16. [The PIER Program Manager needs to be formally] accountable for PIER, and responsible for presenting and defending the program to the CEC, the external oversight agencies, the Legislature, and the Governor.	The PIER JPA Concept makes the Program Director accountable for PIER	
P17. There is an urgent need for the CEC to develop a management plan and a formal organizational structure to properly staff and more effectively manage the program.	The PIER JPA Concept has a formal organizational structure that meets adequate staff and management needs	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P18. Managers do not have the independence and authority they need to be as effective as possible.	The PIER JPA Concept empowers managers to act as effectively as possible	Requires JPA partner's legislative or administrative exemptions from control agency oversight
P19. The CEC is a regulatory agency with a risk-averse culture.	The PIER JPA Concept would separate PIER from the CEC	

Figure 12: Implementation Requirements for PIER JPA Concept to Address Attributes of a First-Class Public Interest RD&D Program

Attributes of a First-Class Public Interest RD&D Organization	Implementation Needed	
	Solutions	**Outstanding Issues**
Legislative Objectives and Strategy		
A1. Synergies with other government incentive, standard-setting and regulation programs	The PIER JPA Concept provides the appropriate organizational structure and oversight mechanism	
A2. Flexibility to fund the short, medium or long-term research that best serves the needs of ratepayers	The PIER JPA Concept allows PIER to determine own research priorities	
Processes		
A3. Flexibility to use a variety of contracting mechanisms (e.g., sole source, competitive solicitation) and retain intellectual property features currently enjoyed by PIER	The PIER JPA Concept retains and builds on current contracting flexibility	Requires JPA partner's legislative or administrative exemption from control agency oversight
A4. Risk-taking culture, consistent with program mission	The PIER JPA Concept provides the appropriate organizational structure	Requires JPA partner's legislative or administrative exemption from control agency oversight
A5. Collaborates effectively with state and federal agencies, companies and other research organizations	The PIER JPA Concept allows PIER to collaborate effectively	
A6. Functional and meaningful program plan and transparent planning process	The PIER JPA Concept governance includes transparency in planning process with appropriate oversight	
A7. Clearly established budgeting process for RD&D and program operations	The PIER JPA Concept defines an inclusive budgeting and planning process	Requires JPA partner's legislative or administrative exemption from control agency oversight
A8. Creates and tracks value from its RD&D efforts (e.g., public IP, technology commercialization, regulation implementation)	The PIER JPA Concept includes monitoring and management of value generated by the program	
Resources		
A9. Ability to add or reduce contract staff as workload requires	The PIER JPA Concept provides staffing flexibility	Requires JPA partner's legislative or administrative exemption from control agency oversight
A10. Ability to attract and retain high quality staff	The PIER JPA Concept provides the organizational structure and compensation to attract high quality staff	Requires JPA partner's legislative or administrative exemption from control agency oversight
A11. Program director controls the authorized budget, staff and contract staff	The PIER JPA Concept gives the Program Director control over budget and staff (internal and contracted)	Requires JPA partner's legislative or administrative exemption from control agency oversight
Organization		

A12. With approval from the board, the Program Director has the flexibility to reorganize the program in response to changing conditions	The PIER JPA Concept allows the Program Director to reorganize the program with authorization from the board	Requires JPA partner's legislative or administrative exemption from control agency oversight
A13. Program director has authority and accountability for the following, consistent with approved budgets and plans: -Portfolio of program RD&D -Resource allocation in terms of staffing and budgets -Staff development (e.g., training, conference attendance, travel) -Hiring and firing staff -Organization and structure -Contract staffing flexibility -Signing contracts -Presenting and defending program to other interests -Developing the strategic direction of program and strategic relationships	The PIER JPA Concept gives the Program Director authority over all of these issues	Requires JPA partner's legislative or administrative exemption from control agency oversight
A14. Program director is responsible for presenting and defending the program to the CEC, external oversight agencies, the Legislature and the Governor.	The PIER JPA Concept makes the Program Director responsible for communicating the program to external stakeholders	
A15. Program director is accountable for the program's performance	The PIER JPA Concept makes the Program Director accountable for the program	
A16. Board-level entity provides checks and balances for Program Director	The PIER JPA Concept provides the appropriate oversight mechanisms	

The Energy Commission will require approval from the Department of General Services to enter into any JPA agreement. However, it is unclear if new legislation would be required to create the PIER JPA Concept. As with other state agencies, the Energy Commission does not require special legislation to enter into a JPA to conduct RD&D activities with another agency that has such power, like the University of California. Yet in this case, only the Energy Commission is given legal responsibility for the PIER Program by the legislature. Therefore, legislation would be required to assure a complete delegation of authority for PIER from the Energy Commission to the PIER JPA.

However, it appears that the Energy Commission could contract with a JPA to provide specific, selected program implementation responsibilities without delegating its authority for PIER. In essence this is what the Energy Commission does today because of insufficient staffing in the PIER Program. For example, under an interagency agreement with the University of California Office of the President (UCOP), the Energy Commission has encumbered $50 million and delegated complete authority to staff, administer and make awards in a number of PIER program activities including the Demand Response Center ($8 million over 3 years; the Transmission Planning R&D initiative ($15 million over 2 years); and the Environmental Exploratory Grant Program ($1 million a year). Another example is the Energy Innovative Small Grants program in which the Energy Commission delegates to the San Diego State University Foundation the responsibility for administering a $3 million per year program. In each case, the Energy Commission has the final approval on the awards but "out-sources" administration to third parties.

It appears that absent amendment to PIER enabling legislation, the PIER JPA Concept would be able to administer most aspects of the PIER Program (further legal analysis is needed before it can be confirmed absolutely) but final responsibility for Program decisions, such as awarding Program grants, would remain with the Energy Commission. The PIER enabling legislation designates the Energy Commission as the body responsible for fundamental Program decisions, such as determining the types of RD&D activities that are not adequately provided for by competitive and regulated markets, determining whether sole source awards are in the state's best interest, and awarding Program grants. In addition, state employees must make up at least 50% of any scoring panel evaluating Program applications. This means that without legislative changes, the PIER JPA Concept would require contracts to be approved by both the Energy Commission and the PIER JPA Concept board. While it is unlikely that the Energy Commission would reverse or overrule a decision made by the PIER JPA Concept board, since the Energy Commissioners would have a controlling majority of the board, the contracting process will be longer than if it only required approval from one board.

The PIER JPA Concept retains Energy Commission and legislative oversight of the PIER Program, and keeps the PIER Program closely linked to California energy policies and governmental energy programs by:

- Naming all five Energy Commissioners as PIER JPA Concept board members with majority control of the board
- Co-locating the PIER JPA Concept with the Energy Commission.

The PIER JPA Concept minimizes disruptions to the PIER Program during the transition to an external entity by:

- Contracting with the Energy Commission to employ all Energy Commission staff currently working in PIER Program
- Contracting back to the Energy Commission for all the support functions the PIER Program currently funds at the Energy Commission.

The PIER JPA Concept would be a separate entity with new contracting and hiring guidelines and processes. It will also have a mixture of staff from the Energy Commission, the PIER JPA Concept or the JPA's partner organization(s). This could add significant complexity to support functions.

Summary Discussion of PIER JPA Concept

The PIER JPA Concept has many attractive features that are not found in the other options. It provides significant flexibility in terms of assigning the desired governance structure, operating processes, contracting and staffing. The analysis shows that this flexibility could allow the PIER JPA Concept to follow PIER guiding principles, address all the problems that the IPR identified with the PIER Program, as well as cover all attributes of a first-class public interest RD&D organization.

A key consideration in implementing the PIER JPA Concept will be the selection of the JPA partner(s). The JPA partner(s) will need to contribute the appropriate capabilities (e.g., technical expertise, research program management, market connections), as well as flexible contracting, budgeting and staffing guidelines (e.g., oversight exemption from the Department of General Services, Department of Finance, State Personnel Board, Public Employment Relations Board, Department of Personnel Administration).

The Energy Commission would require approval from the Department of General Services to enter into a JPA agreement. It is possible that the Energy Commission could, through a contract, delegate specific PIER Program responsibilities to a JPA without delegating the legislative power for PIER but further legal analysis is needed before it can be confirmed absolutely.

The PIER JPA Concept would have to have all funding agreements approved by the Energy Commission. This would add approximately two weeks time to funding decisions. With legislation authorizing the Energy Commission to delegate complete legal authority for PIER from the Energy Commission to the PIER JPA Concept, the JPA would not need to pass any funding agreements to the Energy Commission for final approval. In either case, the five Energy Commissioners would retain control of the PIER Program. Through them, the Legislature would retain oversight of the PIER Program.

The PIER JPA Concept would suffer minimal “start-up pains”, retain legislative oversight of the PIER Program and keep the PIER Program’s link to California energy policies and governmental energy programs because:

- All five Energy Commissioners would sit on the PIER JPA board and constitute a majority of the board
- The PIER JPA would co-locate with the Energy Commission
- All Energy Commission staff currently working on the PIER Program could continue working in civil service on public interest energy research at the PIER JPA
- All the administrative and support functions currently provided to the PIER Program could be contracted from the Energy Commission.

Note, however, that if some Energy Commission staff did not choose to work at the JPA or were not selected to continue working on public interest energy research at the JPA, this could negatively impact the Energy Commission.

PUBLIC BENEFIT CORPORATION (PBC) OPTION

Description of PBC Option

A California Public Benefit Corporation (PBC), also called a Nonprofit Public Benefit Corporation, is a nonprofit, non-stock corporation organized for charitable, social, educational, recreational or similar purposes formed under the Nonprofit Corporation Law. PBCs are subject only to limitations contained in their articles of incorporation or bylaws.

Like with other organizational structures, PBCs offer a range of benefits. A common benefit sought through PBCs is the ability to have broad participation from public, non-profit, and for-profit organizations. PBCs also offer maximum flexibility to find the best sources of funding. In addition, PBCs can have as much operating flexibility as it defines, offering the potential for great efficiencies.

An example of a PBC is the New York State Energy Research and Development Authority (NYSERDA). Arguably the closest comparable organization to the PIER Program, NYSERDA was created in 1975 by the New York State Legislature to serve as the statewide administrator for New York's various public goods energy programs, including energy research. Its 13-member board is made up of four ex officio members who head cabinet-level state agencies. The remaining nine members are appointed by the governor with approval of the state senate and represent a diverse background (e.g., scientist, engineer, and economist) and include the senior officers of an electric utility and a gas utility. The chairman is an unpaid position, appointed by the governor. The board provides high-level direction and does not get involved in day-to-day operations, like in any corporate setting. The NYSERDA president had a significant freedom to manage the program and hire/fire staff. Policies and guidelines were designed to conform to state standards and stand up to scrutiny, but generally had much more flexibility than those at the average state agencies. All the key administrative functions were housed internally at NYSERDA since it seemed to simplify things for the staff and management. NYSERDA has a staff of 200 people, with an annual budget of $170 million. The program manages to keep a low program administration cost due to high workloads and concentration in junior staff.

Another example of a PBC analogous to PIER is the San Diego Regional Energy Office (SDREO). This program, funded primarily by California ratepayers under the auspices of the California Public Utilities Commission, provides research, analysis and long-term planning on energy issues for the San Diego region. SDREO began with a Memorandum of Understanding signed between San Diego Gas & Electric (SDG&E), San Diego Association of Governments, and the San Diego State University Foundation with the purpose of supporting the implementation of the 1994 San Diego Regional Energy Plan. In2001, SDREO was formalized as a PBC when it received around 15% of the public goods funds generated in the SDG&E territory. No special legislation was required to create SDREO, only the same approval from the Secretary of State required for all non-profit corporations. SDREO also pursues private foundation grants, federal

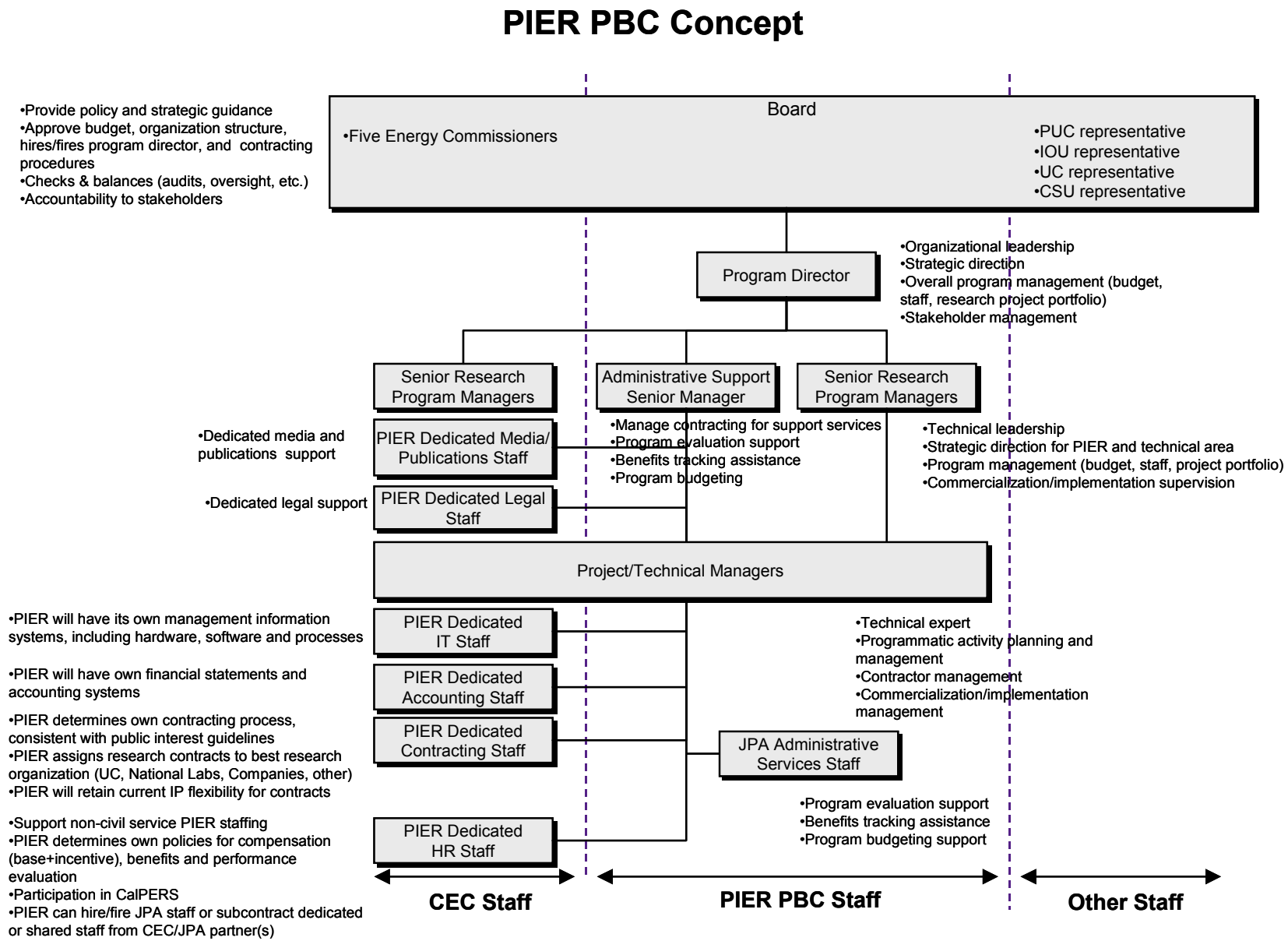
funding (e.g., DOE, EPA), and state funding (e.g., Energy Commission) to support its activities. It currently manages over $30 million in public funds. The 10-member board incorporates a broad range of stakeholders including politicians, academics, corporate leaders, customers, and community activist groups. A current SDREO board member was still an Energy Commissioner when he joined SDREO's board. The board does not look at the contracts awarded to and by SDREO individually, but expects to see proper controls in place (e.g., contracts require a minimum of three signatures). The executive director has the responsibility to make the organization as effective and cost efficient as possible.

A unique example of a PBC is SAFE-BIDCO. This organization is a 501(c)3 non-profit corporation created over 20 years ago by the state legislature to manage energy efficiency loans to small businesses, landlords, and non-profit organizations. SAFE-BIDCO is governed by a board, which is made up of appointees from the governor's office, Legislature, and related (i.e., funding) state agencies including the Energy Commission. This has helped ensure a close linkage between the program and the state government. With the support of its board, SAFE-BIDCO has repeatedly gone back to the Legislature to expand its capabilities and authority. The most prominent example of this is that of the corporation obtaining the ability to manage Small Business Association (SBA) 7(a) Guaranteed Loans on behalf of the federal government. SAFE-BIDCO does not operate like a public agency, having only 12 employees and contracting out many administrative services to private companies. However it is authorized under state law to participate in CalPERS. The current expectation is that SAFE-BIDCO will begin actively participating in CalPERS in two to three months.

PIER PBC Concept

The PIER PBC Concept *(Figure 13)* consists of a high-level definition of the governing board/commission, as well as key program management and support positions.

Figure 13: PIER PBC Concept



PIER PBC Concept Governance

A PBC can define its own governance structure and guidelines. Typically, you will find a board of directors that provide guidance and share oversight responsibility over the PBC. Board members can be independent individuals or come from public, non-profit and for-profit organizations, including state agencies, private research organizations, and investor owned utilities. The PBC can distribute voting rights among board members in any way it deems appropriate. It also has the ability to create board level committees (e.g., research planning, finance, compensation, and audit).

Only individuals and not organizations can be board members in a PBC. This means that while the Energy Commission cannot be a board member, its commissioners can be board members. To retain control over a PBC, the Energy Commission could craft the bylaws so that the state agency would have majority control. The bylaws could state that a specified number of board seats would be given to the individuals acting as Energy Commissioners.

The PIER PBC Concept has a board of directors comprised of the five Energy Commissioners and representatives from the Public Utilities Commission, an Investor Owned Utility, the University of California, and California State University. The five Energy Commissioners would constitute a majority of the board. This structure would allow the Energy Commission (and thus the Legislature) to retain oversight of the PIER Program and keep the PIER Program closely linked with California energy policies and governmental energy programs. The board would have the same roles and responsibilities that were defined in the Energy Commission RD&D Division option and the PIER JPA Concept, including:

- Providing policy and strategic guidance
- Approving budgets, organizational structure, and contracting procedures
- Hiring and firing the Program Director
- Applying checks and balances (e.g., audits, oversight committees)
- Retaining accountability for the program to stakeholders.

The Energy Commission appointed board members, as with other board members appointed from state agencies in general, do not have the same liability immunity enjoyed while functioning in their agency role. They would have the same liability as other independent directors. However, their respective state agencies would owe these individuals liability indemnity and the cost of defense. Moreover, as a director of a non-profit, the board members have the duty to ensure that the PBC has liability insurance.

Similar to the PIER JPA Concept, the PIER PBC Concept also defines the position of the Program Director, which would have the control over day-to-day operations of the program. The Program Director roles and responsibilities include:

- Providing leadership and strategic direction to the organization
- Managing the program (e.g., budgeting, staffing, research portfolio)

- Dealing with external stakeholders (e.g., Legislature, Governor, state energy agencies).

The PIER PBC governance structure can take any form and function. The PIER PBC Concept defined a board of directors comprised of the five Energy Commissioners and representatives from the Public Utilities Commission, an Investor Owned Utility, the University of California, and California State University. Variations of that board could include fewer Commissioners, and fewer or more individuals representing different stakeholder groups. However, it would be valuable to allow the Commission to retain a controlling stake, either by retaining a voting majority or by establishing weighted voting procedures. The position of Program Director can also have variations in its title, authorities and responsibilities.

PIER PBC Concept Operating and Support Processes

A PBC has no contracting or staffing restrictions, other that the ones defined in its articles of incorporation and bylaws. While PBCs allow for closed meetings as well as reduced requirements for financial disclosure, a PBC can decide to comply with Brown Act and publish financial statements.

The operating flexibility offered by a PBC allows the Energy Commission to retain control over the PIER Program while removing contracting and staffing limitations imposed on state agencies. This would allow the PIER PBC Concept to function like a first-class RD&D organization, awarding research and technical support contracts, as well as managing permanent and contracted staff, as the program deems appropriate.

As shown in Figure 13, the PIER PBC Concept would employ staff from the Energy Commission in addition to having its own employees. By employing Energy Commission staff that currently work in the PIER Program, the PIER PBC Concept would retain the staff that the IRP has praised for its “strong knowledge base” and “motivation”. This would minimize disruption to the PIER Program during the transition from the Energy Commission to the PBC. Furthermore, with this core Energy Commission staff on board, the PIER PBC Concept would be able to “hit the ground running” from the very first day of its existence. However, without legislation the Energy Commission cannot contract its staff to work at the PIER PBC Concept.

Although a PBC has the ability to hire its own administrative support staff, Figure 12 shows that the PIER PBC Concept would contract with the Energy Commission to provide the same support functions it currently provides the PIER Program, including contract processing, legal support, media support, publications, accounting, human resources and information technology. These services would be done under the PIER PBC Concept rules, however, not the state’s. Contracting back to the Energy Commission would minimize disruption to the PIER Program during the transition by avoiding the need to develop support services from scratch immediately. However without legislation, the Energy Commission cannot contract with the PIER PBC Concept to provide the same support functions it currently provides the PIER Program. If the

Energy Commission decided it did not want to perform the administrative functions or it was not authorized by legislation to perform such functions, the PIER PBC would need to choose between hiring internal staff and outsourcing to another third party.

The PIER PBC Concept should be co-located with the Energy Commission to facilitate close contact with other Energy Commission staff and the Commissioners. This would retain the PIER Program's close link with California energy policies and governmental energy programs. However, it is unclear whether a PBC that is not a governmental entity may lease space in a state-owned building.

Assessment of PIER PBC Concept

As the analysis shows *(Figures 14 – 16)*, the PIER PBC Concept addresses all guiding principles, IRP problem statements and attributes of a first-class RD&D public interest organization. Once the PBC is incorporated, there are not significant legislative or regulatory changes required. Thus, the implementation effort would be centered on the PBC incorporation itself.

Figure 14: Implementation Requirements for PIER PBC Concept to Address Guiding Principles

PIER Guiding Principles	Implementation Needed	
	Solutions	**Outstanding Issues**
Legislative Objectives and Strategy		
Integrated with state energy policy	PIER PBC Concept allows program to follow this principle and for CEC commissioners to review compliance.	Without legislation, CEC staff cannot work at the PIER PBC Concept
Funds public interest energy research that benefits California electric ratepayers	Would be a stated purpose in the PBC agreement	
Complimentary with other public and private sector RD&D efforts and implementation programs	PIER PBC Concept allows program to follow this principle and for CEC commissioners to review compliance	
Non-duplicative of private sector research	PIER PBC Concept allows program to follow this principle and for CEC commissioners to review compliance	
Clear and manageable program mission, vision and strategic objectives	PIER PBC Concept allows program to follow this principle and for CEC commissioners to review compliance	
Conveys high-impact information for decision making to policymakers in a timely manner	PIER PBC Concept allows program to follow this principle and for CEC commissioners to review compliance	Without legislation, PIER PBC Concept cannot be co-located with CEC.

Figure 15: Implementation Requirements for PIER PBC Concept to Address IRP Problem Statements

IRP Problem Statements	Implementation Needed	
	Solutions	**Outstanding Issues**
Legislative Objectives and Strategy		
P1. The CEC is a regulatory agency with a near-term focus.	PIER PBC Concept takes PIER outside CEC	
Processes		
P2. The special needs of managing R&D have been achieved primarily through informal arrangements and not by specific organizational structure, which is an important requirement for a first class research program.	PIER PBC agreement would provide formal authority to Program Director over the organizational structure	
P3. [Staff reductions have] led to awarding larger research contracts as a means to manage with staff limitations.	PIER PBC agreement would provide the needed flexibility to increase the number of staff required to adequately manage the program	
P4. [Staff reductions have lead to] large-scale outsourcing of blocks of R&D contracts to organizations outside the CEC. This makes it more difficult to guarantee that PIER projects adhere to the CEC goals and PIER objectives.	PIER PBC agreement would provide the needed flexibility to increase the number of staff required to adequately manage the program	
P5. Cumbersome administrative practices, [such as the contract preparation process, remain a major concern.	PIER PBC agreement would provide the needed flexibility to change administrative practices	
P6. The CEC is a regulatory agency with limited flexibility.	PIER PBC Concept takes PIER outside CEC into a new organization with more operational flexibility	
Resources		
P7. Civil service requirements and, more recently, budgetary issues have prevented the filling of needed staff positions and hiring of expert [contract staff].	PIER PBC Concept would not have the civil service requirements	
P8. PIER may have a lack of "intellectual critical mass" and a severely reduced knowledge base in some important areas.	PIER PBC Concept will not have current contract staff restrictions	
P9. Recent staff and budget cuts within the CEC affected the PIER Program in a manner disproportionate to cuts in other divisions and programs of the CEC.	PIER PBC Concept would shield PIER from budget cuts	
P10. Under the current civil service rules, it is difficult to attract and retain top research managers.	PIER PBC Concept would not have the civil service requirements	
P11. The extremely limited travel budget for PIER staff hinders staff professional development and key interchanges with staff and stakeholders in other programs, including the U.S. DOE. These constraints severely affect the ability of PIER staff to keep up to date on scientific, technological and policy issues relevant to the PIER Program and to develop collaborative, crosscutting programs.	PIER PBC Concept would not have the travel restrictions imposed to CEC staff	
Organization		
P12. [PIER has yet to] acquire division status within the CEC with the authority and resources needed by a "high-quality" research program.	PIER PBC Concept provides the authority and makes available the resources required without restrictions	
P13. [As a contract employee], the current PIER Program Manager does not have direct control over staffing for the program [and cannot hire or fire employees].	PIER PBC Concept provides the Program Director with authority over staffing issues	

P14. The PIER Program Manager does not have the authority to sign research contracts or to manage budgets, because the civil service structure of the CEC does not allow a contractor to take on these responsibilities.	The PIER PBC Concept allows the Program Director to sign research contracts	
P15. The characteristics of the CEC's organizational culture and bureaucracy conflict with the characteristics of an organizational environment that facilitates a superior R&D program.	The PIER PBC Concept would separate PIER from the CEC thereby eliminating conflict	
P16. [The PIER Program Manager needs to be formally] accountable for PIER, and responsible for presenting and defending the program to the CEC, the external oversight agencies, the Legislature, and the Governor.	The PIER PBC Concept makes the Program Director accountable for PIER	
P17. There is an urgent need for the CEC to develop a management plan and a formal organizational structure to properly staff and more effectively manage the program.	The PIER PBC Concept has a formal organizational structure that meets adequate staff and management needs	
P18. Managers do not have the independence and authority they need to be as effective as possible.	The PIER PBC Concept empowers managers to act as effectively as possible	
P19. The CEC is a regulatory agency with a risk-averse culture.	The PIER PBC Concept would separate PIER from the CEC	

Figure 16: Implementation Requirements for PIER PBC Concept to Address Attributes of a First-Class Public Interest RD&D Program

Attributes of a First-Class Public Interest RD&D Organization	**Implementation Needed**	
	Solutions	**Outstanding Issues**
Legislative Objectives and Strategy		
A1. Synergies with other government incentive, standard-setting and regulation programs	The PIER PBC Concept provides the appropriate organizational structure and oversight mechanism	
A2. Flexibility to fund the short, medium or long-term research that best serves the needs of ratepayers	The PIER PBC Concept allows PIER to determine own research priorities	
Processes		
A3. Flexibility to use a variety of contracting mechanisms (e.g., sole source, competitive solicitation) and retain intellectual property features currently enjoyed by PIER	The PIER PBC Concept retains and builds on current contracting flexibility	
A4. Risk-taking culture, consistent with program mission	The PIER PBC Concept provides the appropriate organizational structure	
A5. Collaborates effectively with state and federal agencies, companies and other research organizations	The PIER PBC Concept allows PIER to collaborate effectively	
A6. Functional and meaningful program plan and transparent planning process	The PIER PBC Concept governance includes transparency in planning process with appropriate oversight	
A7. Clearly established budgeting process for RD&D and program operations	The PIER PBC Concept defines an inclusive budgeting and planning process	
A8. Creates and tracks value from its RD&D efforts (e.g., public IP, technology commercialization, regulation implementation)	The PIER PBC Concept includes monitoring and management of value generated by the program	

Resources		
A9. Ability to add or reduce contract staff as workload requires	The PIER PBC Concept provides staffing flexibility	
A10. Ability to attract and retain high quality staff	The PIER PBC Concept provides the organizational structure and compensation to attract high quality staff	Without legislation CEC staff cannot contract with PIER PBC to perform ongoing program and project management.
A11. Program director controls the authorized budget, staff and contract staff	The PIER PBC Concept gives the Program Director control over budget and staff (internal and contracted)	
Organization		
A12. With approval from the board, the Program Director has the flexibility to reorganize the program in response to changing conditions	The PIER PBC Concept allows the Program Director to reorganize the program with authorization from the board	
A13. Program director has authority and accountability for the following, consistent with approved budgets and plans: -Portfolio of program RD&D -Resource allocation in terms of staffing and budgets -Staff development (e.g., training, conference attendance, travel) -Hiring and firing staff -Organization and structure -Contract staffing flexibility -Signing contracts -Presenting and defending program to other interests -Developing the strategic direction of program and strategic relationships	The PIER PBC Concept gives the Program Director authority over all of these issues	
A14. Program director is responsible for presenting and defending the program to the CEC, external oversight agencies, the Legislature and the Governor.	The PIER PBC Concept makes the Program Director responsible for communicating the program to external stakeholders	
A15. Program director is accountable for the program's performance	The PIER PBC Concept makes the Program Director accountable for the program	
A16. Board-level entity provides checks and balances for Program Director	The PIER PBC Concept provides the appropriate oversight mechanisms	

As with all public benefit corporations, the Energy Commission would need to register the PIER PBC Concept with the Internal Revenue Service and the California Secretary of State to achieve tax-exempt status. However, it is unclear if it would require new legislation to create the PIER PBC Concept. There do not appear to be limitations on Energy Commissioner participation in a PBC, as a former Commissioner was a board member in SDREO during his tenure, and SDREO receives funding from state agencies such as the CPUC and the Energy Commission without having special legislation put in place.

As with the PIER JPA Concept, it is possible that the Energy Commission could, through a contract, delegate specific PIER Program responsibilities to a PBC without delegating the legislative power for PIER. In essence this is what the Energy Commission does today because of insufficient staffing in the PIER Program. For example, under an interagency agreement with the University of California Office of the President (UCOP), the Energy Commission has encumbered $50 million and delegated complete authority to staff, administer and make awards in a number of PIER program

activities including the Demand Response Center ($8 million over 3 years; the Transmission Planning R&D initiative ($15 million over 2 years); and the Environmental Exploratory Grant Program ($1 million a year). Another example is the Energy Innovative Small Grants program in which the Energy Commission delegates to the San Diego State University Foundation the responsibility for administering a $3 million per year program. In each case, the Energy Commission has the final approval on the awards but “out sources” administration to third parties.

While a PIER PBC Concept would be able to administer most aspects of the PIER Program (further legal analysis is needed before it can be confirmed absolutely), final responsibility for program decisions, such as awarding program grants, would remain with the Energy Commission, absent amendment to the PIER enabling legislation. The PIER enabling legislation designates the Energy Commission as the body responsible for fundamental program decisions, such as determining the types of RD&D activities that are not adequately provided for by competitive and regulated markets, determining whether sole source awards are in the state's best interest, and awarding program grants. In addition, state employees must make up at least 50% of any scoring panel evaluating program applications. However, except for the final decisions that are reserved to the Energy Commission, a PIER PBC would be able to perform all other aspects of the program, including presenting recommendations to the Commissioners concerning the decisions reserved to the Energy Commission. However, it is unlikely that the Energy Commission would reverse or overrule a decision made by the PIER PBC board, since the Energy Commissioners would have a controlling majority of the PBC board.

The PIER PBC Concept retains Energy Commission and legislative oversight of the PIER Program, and keeps the PIER Program closely linked to California energy policies and governmental energy programs by:

- Naming all five Energy Commissioners as PIER PBC Concept board members with majority control of the board
- Co-locating the PIER PBC Concept with the Energy Commission.

The latter would require legislation to authorize the Energy Commission to contract with the PIER PBC Concept.

The PIER PBC Concept minimizes disruptions to the PIER Program during the transition to an external entity by:

- Contracting with the Energy Commission to employ all Energy Commission staff currently working in PIER Program
- Contracting back to the Energy Commission for all the support functions the PIER Program currently funds at the Energy Commission.

These two actions would require legislation to authorize the Energy Commission to contract with the PIER PBC Concept.

It should also be remembered that the PIER PBC Concept would be a separate entity with new contracting and hiring guidelines and processes. It will also have a mixture of its own staff, staff from the Energy Commission, and other contract staff. All of this will add significant complexity to support functions.

Summary Discussion of PIER PBC Concept

The PIER PBC Concept provides the highest degree of organizational structure and operating flexibility, allowing it to make PIER a first-class public interest RD&D program. The analysis shows that this flexibility could allow the PIER PBC Concept to follow PIER guiding principles, address all the problems that the IPR identified with the PIER Program, as well as cover all attributes of a first-class public interest RD&D organization. Once established the PIER PBC Concept would be exempt from oversight by the Department of General Services, Department of Finance, State Personnel Board, Public Employment Relations Board, and Department of Personnel Administration.

The Energy Commission would need to register the PIER PBC with the Internal Revenue Service and the California Secretary of State. However, it is unclear if new legislation would be required to create the PIER PBC.

As with the PIER JPA Concept, legislation would be required to assure a complete delegation of authority for the PIER Program from the Energy Commission to the PIER PBC. However, it is possible that the Energy Commission could delegate specific PIER Program responsibilities to a PBC without delegating the legislative power for PIER (further legal analysis is needed before it can be confirmed absolutely). The PIER PBC would have to have all funding agreements approved by the Energy Commission. This would add approximately two weeks time to funding decisions. With legislation authorizing the Energy Commission to delegate complete legal authority for PIER from the Energy Commission to the PIER PBC Concept, the PIER PBC Concept would not need to pass any funding agreements to the Energy Commission for final approval. In either case, the five Energy Commissioners would retain control of the PIER Program. Through them, the Legislature would retain oversight of the PIER Program.

The PIER PBC Concept would suffer minimal “start-up pains”, retain legislative oversight of the PIER Program and keep the PIER Program’s link to California energy policies and governmental energy programs by:

- Naming all five Energy Commissioners as PIER PBC Concept board members with majority control of the board
- Co-locating the PIER PBC Concept with the Energy Commission
- Contracting with the Energy Commission to employ all Energy Commission staff currently working in PIER Program
- Contracting back to the Energy Commission for all the support functions the PIER Program currently funds at the Energy Commission.

The latter three actions would require legislation to authorize the Energy Commission to contract with the PIER PBC. Note, however, that if some Energy Commission staff did not choose to work at the PBC or were not selected to continue working on public interest energy research at the PBC, this could negatively impact the Energy Commission.

COMPARISON OF PIER ORGANIZATIONAL CONCEPTS

The priorities used to compare the three organizational concepts are:

- Meet legislative intent when establishing the PIER program including retaining strong Energy Commission oversight, linkage with state energy policies and policymakers, and coordination with other state agencies
- Solve problem statements asserted by the IRP report
- Incorporate attributes of a first- class public interest RD&D organization
- Minimize disruption to the PIER Program during transition to a new organizational structure.

A first-class public interest R&D program can be designed and administered under each of the three organizational concepts analyzed in this report. In general, all three organizational concepts retain strong Energy Commission oversight, establish direct linkages state policy, solve problems statements asserted in the IRP report, and incorporate attributes of a first-class public interest RD&D organization. The key differences among the organizational concepts are the implementation issues that would need to be addressed under each option.

Internal Option Concept

The Internal Option Concept has the strongest Energy Commission oversight by keeping the PIER program within the Energy Commission. The Energy Commissioners will also serve to link the program to state energy policy and oversee the program's coordination with other state agencies. The Internal Option Concept addresses all the IRP problem statements and attributes by securing administrative exemptions, and will require various legislative and policy changes that include, at a minimum, an exemption to oversight from the Department of General Services for approving contracts; an exemption from civil service requirements; and new classifications (e.g., responsibilities, supervision ratios, compensation) for PIER staff. These changes are substantive and, in some cases, unique in state service. The Internal Option Concept has the fewest negative impacts on the Energy Commission. It will add staff, responsibility and authority. It will also have administrative processes and procedures that differ from the rest of the Commission.

Implementing the Internal Option Concept as envisioned by the IRP will require obtaining administrative and legislative exemptions. These exemptions apply to three key areas:

- Staffing. Vesting staffing control with the Program Director requires administrative relief from Department of Personnel Administration (DPA), State Personnel Board (SPB), and Public Employment Relations Board (PERB) oversight. Examples of this staffing control include:

- Creating positions outside of the budget change proposal (BCP) process (one year for the BCP, up to an additional year to hire),
- Changing the organizational structure of PIER in response to programmatic changes without regard to staffing ratios.

Creating new civil service classifications and new pay grades can be accomplished with existing administrative processes.

- Budgets. Vesting budget control with the Program Director requires administrative relief from the Resources Agency and Department of Finance oversight. Examples of budget control include:

    - PIER budget no longer subject to Executive Orders or changes in Department of Finance policies
    - Related to staffing above, the Program Director has the authority to shift funds within an approved budget to meet staffing needs, outside of the BCP process
    - PIER travel budget no longer subject to Executive Orders or changes in Department of Finance policies.

- Procurement. Contract approval currently rests with the Commission. Vesting contract approval with the Program Director will require legislated delegation of contract approval authority normally reserved for the Commissioners and control agencies.

Legislative exemptions have the advantage of greater permanency, but the disadvantage of being risky (e.g., undesirable legislative provisions being added). If the control agency has the authority, administrative relief from procedures and rules reduces the risks associated with legislation, but the outcomes are not guaranteed. However, the result may be slower, more incremental solutions to the IRP problems. Also, administrative relief can be reversed by changing interpretations of rules, new agency heads and new policy. Examples of steps to implement the Internal Option Concept could include the following:

- Determine nature of exemptions. For proposed actions to obtain exemptions from control agency oversight, determine which exemptions can be obtained administratively, through legislation, or through executive orders. For exemptions requiring administrative actions, determine which control agencies are involved and establish an agency task force to negotiate with control agencies and establish exemptions. For exemptions requiring legislation, establish an agency task force with stakeholders, establish legislative sponsorship in coordination with the IRP, and draft and enact legislation.

- Implement new PIER structure. It is estimated that fully implementing the Internal Option Concept may take up to a year without legislation (according to Administrative Services staff) and 2 – 3 years with legislation.

PIER JPA Concept

The PIER JPA Concept retains strong Energy Commission oversight and linkages to state energy policies and other agencies by having the Energy Commissioners form a majority of the board. The PIER JPA Concept addresses all the IRP problem statements and attributes; however, this requires that the JPA partner(s) contribute the appropriate capabilities (e.g., technical expertise, research program management, and market connections), as well as flexible contracting and staffing guidelines (i.e., oversight exemption from the Department of General Services, Department of Finance, State Personnel Board, Public Employment Relations Board, and Department of Personnel Administration). The PIER JPA Concept would minimize disruption to the PIER Program during the transition to the JPA as all the services currently supplied by the Administrative Services Division would be contracted for by the PIER JPA and all Energy Commission staff currently working on the PIER program could continue working in civil service via Inter-Jurisdictional Exchanges (IJEs). However, if some Energy Commission staff currently working in the PIER Program did not choose to work at the JPA or were not selected to continue working on public interest energy research at the JPA, this could negatively impact the PIER Program during the transition and startup of the JPA. The administrative processes and procedures would differ from the rest of the Commission, many of them based on the policies of the JPA partner(s).

Absent an amendment to the PIER enabling legislation, the PIER JPA Concept would be able to administer most aspects of the PIER program but final responsibility for program decisions would remain with the Energy Commission. There are examples of JPAs that have been formed by state agencies without legislation. The PIER JPA Concept could be implemented without legislation if all funding decisions made by the PIER JPA Concept continued to be approved by the full Commission. Examples of steps to implement a PIER JPA Concept include the following:

- Preliminary approval of the PIER JPA Concept. The Energy Commission would need to obtain preliminary approval and support from the Governor's Office and the Legislature, especially the energy committee chairs, to pursue implementation.

- Development and approval of a PIER JPA Concept Creation Plan. The plan would include a preliminary determination of the extent to which the Energy Commission can delegate authority over the PIER program to another governmental body without legislation, more detailed steps to create a PIER JPA Concept, estimated time to creation, a budget, and a more detailed description of the PIER JPA Concept. PIER JPA Concept Creation Plan would need to be approved by the Energy Commission with instructions to staff to pursue implementation.

- Selection and approval of the JPA partner(s). It would be necessary to select partner(s) that contribute the appropriate capabilities (e.g., technical expertise, research program management, market connections), as well as flexible contracting and staffing guidelines (e.g., oversight exemption from the

Department of General Services, Department of Finance, State Personnel Board, Public Employment Relations Board, Department of Personnel Administration). JPA partner selection would need to be approved by the governing authorities of all partners and by the Governor's Office and the Legislature.

- Development and approval of the PIER JPA Concept charter. Energy Commission staff and JPA partners' staff would develop the charter with cooperation from the Governor's Office and the Legislature. The PIER JPA Concept charter would need to be approved by the Energy Commission and the PIER JPA partner(s). The Department of General Services must authorize the Energy Commission's formation of the PIER JPA Concept.

- Implement the PIER JPA Concept. It is estimated that fully implementing the PIER JPA Concept may take 1 – 2 years without legislation and 2 – 3 years with legislation.

PIER PBC Concept

The PIER PBC Concept retains strong Energy Commission oversight and linkages to state energy policies and other agencies by having the Energy Commissioners form a majority of the board. The PIER PBC Concept also addresses all the IRP problem statements and attributes of a first-class public interest RD&D organization. However, without enabling legislation, the PIER PBC Concept could have a severe impact on the PIER Program during the transition to the PBC. Enabling legislation is required to allow Energy Commission staff currently working in the PIER program to work for the PIER PBC while retaining their rights and benefits under civil service. Legislation is also required to authorize the Administrative Services Division to contract with the PIER PBC to supply services currently supported by the PIER program. However, if some Energy Commission staff currently working in the PIER Program did not choose to work at the PBC or were not selected to continue working on public interest energy research at the PBC, this could negatively impact the PIER Program during the transition and the startup of the PBC.

As with all public benefit corporations, the Energy Commission would need to register the PIER Public Benefit Corporation (PBC) Concept with the Internal Revenue Service and the California Secretary of State to achieve tax-exempt status. It is unclear if new legislation is needed to create the PIER PBC Concept. While a PIER PBC would be able to administer most aspects of the PIER program, final responsibility for program decisions would remain with the Energy Commission, absent an amendment to the PIER enabling legislation. However, the Energy Commission could contract with a PBC to provide specific, selected program implementation responsibilities without delegating its authority for PIER. Examples of steps to implement a PIER PBC Concept include the following:

- Preliminary approval of the PIER PBC Concept. The Energy Commission would need to obtain preliminary approval and support from the Governor's Office and

the Legislature, especially the energy committee chairs, to pursue implementation.

- Development and approval of a PIER PBC Concept Creation Plan. The plan would include a preliminary determination of the extent to which the Energy Commission can delegate authority over the PIER program to a PBC without legislation, more detailed steps to create a PIER PBC Concept, estimated time to creation, a budget, and a more detailed description of the PIER PBC Concept. Significant uncertainties need to be addressed regarding legislation needed to authorize the Energy Commission to contract with the PIER PBC Concept to provide support services and for the Energy Commission staff to work at the PIER PBC Concept while retaining civil service status. The plan would likely call for simultaneously pursuing legislation and continued planning for the creation of the PIER PBC. The PIER PBC Concept Creation Plan would need to be approved by the Energy Commission with instructions to staff to pursue implementation.

- Development and approval of the PIER PBC Concept articles of incorporation and bylaws. Energy Commission staff would develop the articles of incorporation and bylaws with cooperation from the Governor's Office and the Legislature. The PIER PBC Concept articles of incorporation and bylaws would need to be approved by the Energy Commission and filed with the appropriate authorities.

- Development and approval of enabling legislation. The necessary enabling legislation is drafted by the Energy Commission and passed by the Legislature, signed by the Governor, and takes effect.

- Implement the PIER PBC Concept. It is estimated that fully implementing the PIER PBC Concept may take 1 – 2 years without legislation and 2 – 3 years with legislation.